

# MARYLAND HEALTH CARE COMMISSION

*Informed Consumers / Accountable Health Care*



## STATE HEALTH CARE EXPENDITURES Experience from 1999

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## ii. PREFACE

### ***PURPOSE OF REPORT***

This report was developed to meet the requirement under Health-General Article, §19-1502(c)(7), that directs the Maryland Health Care Commission to annually report on total reimbursement in the state for health care services. A basic mission of the Maryland Health Care Commission (MHCC) is disseminating information that effectively portrays how the health care market in Maryland currently functions. **An essential component in monitoring the performance of the health care system is the level and growth rate of health care spending.** This report provides that information and describes the expenditure patterns that occurred in 1999 for the state's residents and how these patterns differ from 1998.

**This report was designed to address the information needs of various stakeholders in the health care system.** Payers, policymakers, and providers can use the aggregate and per capita health care expenditure analyses to assess the recent trends in the health care system. The provider/service groups' shares of total expenditures and growth rates can be compared to determine which are the most influential in shaping how health care resources are utilized and which services are increasing (or decreasing) in relative significance. Aggregate and per capita information allows purchasers of health insurance to compare their pattern of health care service use to the state and the region in which they operate, and offers payers and policymakers some results with which to assess their policy decisions.

### ***ORGANIZATION OF REPORT / ISSUES INVESTIGATED***

#### **CHAPTER 1: Statewide Health Care Expenditures**

- Expenditures by service: How much was spent on health care statewide in 1999? How have expenditures changed from 1998 and for which service are expenditures growing most rapidly? What portion of expenditures is spent on physician services, hospital care, and other services?
- Expenditures by payer: What portions of expenditures do Medicare, Medicaid, health maintenance organizations and other private insurers pay? How have expenditures by each payer changed from 1998?
- Expenditures by delivery system: What differences exist in the level and distribution of expenditures between HMOs and traditional coverage in both the public and private sectors?
- Out-of-pocket expenditures: How much do patients pay out of their own pockets due to co-payments and deductibles or because they lack insurance coverage for the service? How has this changed from 1998?

## CHAPTER 2: Per Capita Expenditures in Maryland

- Overall: What is the average expenditure per person in 1999 and how has it changed from 1998?
- Expenditures for different insured populations: What are the average expenditures per person for insured services in Medicare, Medicaid, and private insurance compared to 1998? How have out-of-pocket payments for the co-payments, coinsurance and deductibles required by private insurance changed?

## CHAPTER 3: Regional Analysis of Maryland's Health Care Market Place

- Regional variation in factors that influence utilization: How do Maryland's different regions differ in health care coverage, economic, demographic, and health status measures?
- Regional health care spending: Does the proportion of total state spending attributable to each region reflect its share of the population? What is the per capita expenditure in each region and how has it changed from 1998? How has HMO market share changed within each region? What is the overall pattern of service use in each region?

### ***NOTE***

- This report presents information based on the **health care expenditures of Maryland residents**, not expenditures associated with Maryland providers.
- **Technical Notes** at the end of the report describe the data sources and methods used in the development of these accounts.
- All years are **calendar years** unless otherwise indicated.
- Numbers in the text and tables of this report **may not add to totals because of rounding**.

### iii. EXECUTIVE SUMMARY

***State Health Care Expenditures: Experience from 1999*** examines the level, rate of growth, and the pattern of spending in Maryland's large and complex health care market.<sup>1</sup> ***Maryland experienced a 4.6 percent rate of growth in total health care expenditures in 1999, down modestly from the 5.3 percent increase in 1998.*** The 1999 rate of increase is less than the 6.4 percent estimated national rate of increase in health care spending from 1998 to 1999. ***Total health care spending for Maryland residents grew in 1999 to \$19.1 billion, up from \$18.2 billion in 1998. Average direct per capita expenditures across all residents for all services in 1999 was \$3,284, up 2.7 percent from \$3,198 in 1998.*** Health care expenditures for Maryland residents, as a share of personal income, remains at 11 percent. This figure has held constant throughout the late 1990's suggesting growth in personal income has kept pace with increases in health care expenditures.<sup>2</sup>

***Growth in spending by all private insurers and HMOs (a 7.4 percent increase) and by patients (4.0 percent) together account for more than 4/5 of the 1999 increase in expenditures.*** Maryland's private payer increase is comparable to the 7.3 percent rate of growth reported for 1999 by William M. Mercer in the *National Survey of Employer-Sponsored Health Plans*. The private sector, including private payers and patient out-of-pocket (OOP) payments, funds the majority of health expenditures in the state (60.6 percent) accounting for almost three-quarters of total spending on physician services (71.8 percent) and 82.9 percent of all prescription drug expenditures. The government sector, principally the Medicare and Medicaid programs, accounts for 39 percent of spending, but funds 58 percent of inpatient hospital care, two-thirds of nursing home services (primarily through the Medicaid program), and 60 percent of home health care services. ***Overall, government health care spending grew by just 2.1 percent.***

Medical price inflation accounts for over half of the 4.6 percent growth in total expenditures. From 1998 to 1999, the Consumer Price Index (CPI) for medical care services increased about 3.5 percent nationally, but prices increased by 2.4 percent in the Baltimore/Washington DC Metropolitan Area. A small portion of expenditure growth is attributable to the .7 percent increase in population. Other non-quantifiable factors that contributed to greater utilization include continuing technology advances (e.g., new drugs, surgical procedures, and medical therapies), increased enrollment in government programs, an aging population, and expansions in benefit coverage.

### ***LEADING HEALTH CARE EXPENDITURE CATEGORIES***

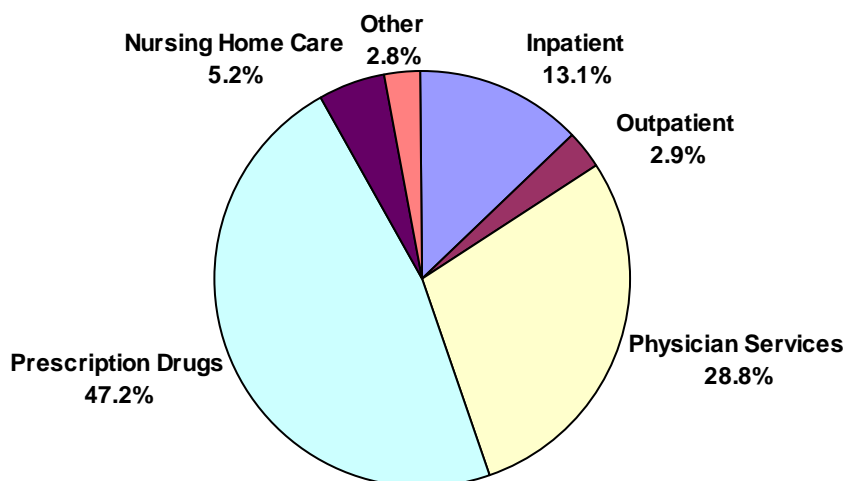
The 4.6 percent rate of growth in overall statewide spending masks substantial differences in growth rates across the types of spending reported in the SHEA. The most rapidly growing component of the SHEA is expenditures on prescription drugs which rose 22.2 percent from 1998 to 1999. The growth in spending on prescription drugs was large enough to make prescription drug expenditures the third largest component of the SHEA, just ahead of spending on other professional services. Almost half (47.2 percent) of the increase in spending is attributable to prescription drugs (Figure ES-1). Increases in spending on physician services account for another 28.8 percent. Together, these two factors account for more than three-quarters (76.0 percent) of the overall increase in statewide spending. Results from 1999 reinforce the recent trend in Maryland towards greater

<sup>1</sup> Previous state health expenditure reports were issued by the Health Care Access and Cost Commission which merged with the Maryland Health Resources Planning Commission in October 1999 to form the MHCC. This is the third year in which the state health expenditure analysis has been issued in a report separate from other analyses.

<sup>2</sup> Personal income for Maryland residents was \$158 billion in 1998 and \$168 billion in 1999.

reliance on drug therapies, physician services, and other forms of health services. This trend is fueled by an increasing availability of pharmaceutical therapies and explicit efforts on the part of almost all payers to shift the delivery of services into outpatient settings whenever it is clinically appropriate. Expenditures for inpatient services continue to decline. Although this sector accounts for around one-quarter of total spending, it contributes only 13.1 percent to the statewide expenditure increase.

Figure ES-1: Sources of Expenditure Growth 1998-1999 By Service



Key findings for leading health care expenditure categories are summarized as follows:

- Expenditures for physician services increased by 5.1 percent in 1999 to \$4.9 billion.** Physician services, as a share of total health care expenditures, increased from 25.9 percent of total expenditures in 1998 to 26.1 percent in 1999. Increased service volume and greater resource intensity may have contributed more to overall growth than physician price inflation which was up 2.2 percent nationwide in 1999 as measured by the Producer Price Index (PPI).<sup>3</sup> Private payers and patient out-of-pocket spending account for 71.8 percent of all payments for physician services.
- The hospital inpatient share of services continued to fall and is down from 24.8 percent in 1998. Inpatient hospital services as a share of total health care expenditures have decreased annually since 1995.** Inpatient hospital spending was \$4.6 billion, a 2.4 percent increase from 1998. Medicare accounts for 44 percent of inpatient payments reflecting the greater need for these services by seniors.
- Prescription drug expenditures jumped by 22.2 percent, the largest increase of any major expenditure category.** These expenditures increased despite tighter plan management, including the growing use of drug formularies, and increased patient co-payments. Factors contributing to growing prescription drug expenditures include continuing expansions in drug treatment protocols for common chronic conditions, overall drug price inflation and increasing patient utilization, somewhat fueled by the direct marketing of prescription drugs to consumers. Despite rising co-

<sup>3</sup> The PPI is preferable to the CPI for measuring price changes in health care because it surveys changes in discounted and negotiated prices paid by third parties as opposed to the CPI which measures changes prices charged to consumers. However, the sample size for the PPI is too small to produce city-specific estimates.



payments and a growing use of formularies, many individuals with prescription drug coverage were buffered from the impact of greater prescription drug spending in 1999 as third-party payers absorbed significant shares of increases in expenditures. Patients without prescription coverage, however, pay an increasingly greater differential for drugs as the gap between retail prices and discounted prices negotiated by large purchasers widens.

- ***Spending on outpatient hospital services (e.g., same-day surgeries, colonoscopies and other minor procedures, emergency room visits) went up 1.5 percent.*** Although these services increased rapidly in the early 1990's, the rate of growth in this sector is now below that of inpatient services. Private coverage accounts for over half (50.9 percent) of total spending on these services.
- ***Spending on other professional health care services, including those provided by non-physician health care providers and organizations such as ambulatory surgery centers, fell slightly in 1999.*** This sector accounts for 10.4 percent of total spending, down from the 10.9 percent share in 1998. Little evidence exists to suggest that utilization is declining for these services, however providers face increasing pressure to offer discounts to third-party payers. Private payers and patient out-of-pocket (OOP) expenditures are responsible for 65.0 percent of spending in this category. OOP payments, including non-covered services and patient co-payments/deductibles, account for 46.4 percent of payments to these providers. The high OOP percentage reflects the limited insurance coverage that exists for many services in this category.
- ***Nursing home expenditures grew by 3.7 percent in 1999.*** Medicaid accounts for over half of the spending for this service and patient out-of-pocket payments are the source of nearly one-third the spending in this category. Recent estimates by the Congressional Budget Office project nursing home spending to rise 2.6 percent annually over the period from 2000 to 2020.<sup>4</sup> In Maryland, as throughout the nation, the rise of competing sources of care, such as assisted living facilities, will present major sources of competition to traditional comprehensive care nursing centers.<sup>5</sup>
- ***Spending on home health care fell by 3.7 percent in 1999.*** In 1998, the Health Care Financing Administration (HCFA) introduced an interim payment system based on average payment limits as part of the 1997 Balanced Budget Amendment (BBA). HCFA implemented a prospective payment system for home health care services in 2000 that will further control payments. These changes illustrate the increasingly aggressive payment and utilization monitoring practices being utilized by all payers after five years of rapid growth in home health care spending.

## ***LEADING SOURCES OF PAYMENT***

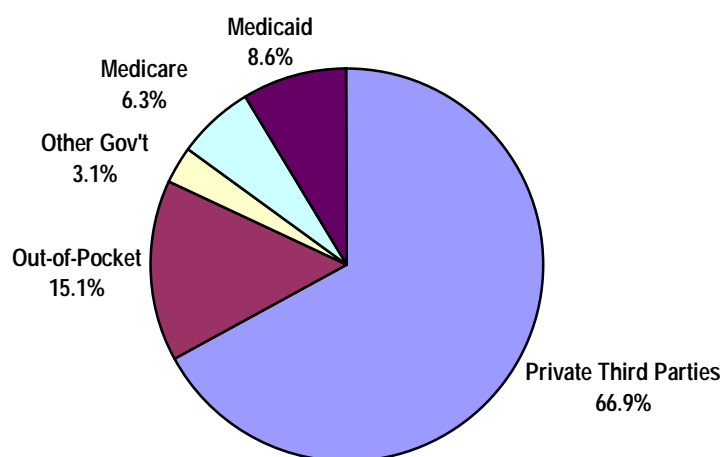
Total private expenditures, including expenditures by private third party payers and patient OOP spending, increased 6.4 percent to over \$11.5 billion in 1999. Payments made by private third party payers jumped 7.4 percent, a significantly higher rate of increase than that for aggregate government expenditures which increased only 2.1 percent to \$7.5 billion. The 4.0 percent increase in OOP spending also exceeds rates of change in public programs but fell short of the growth in

<sup>4</sup> Congressional Budget Office, "Projections of Expenditures For Long-Term Care Services For The Elderly," (Washington DC: March 1999)

<sup>5</sup> Assisted living care is not reimbursed under Medicare, Medicaid, or through private insurance. Expenditures for assisted living services are included in the "Other services" category of the SHEA.

spending with private coverage. The 1999 growth rates follow the pattern for 1998, when percent increases in private coverage expenditures exceeded the statewide average and the public spending rates of growth. ***The expanding private sector in Maryland, accompanied by a relative decline in public spending, is consistent with developments nationally.*** As in Maryland, the national growth in spending by private third parties from 1998 to 1999 substantially exceeds the rise in spending by public programs. The leading role played by private third parties clearly reflects the strong economy in 1999, which tends to increase the proportion of people with privately sponsored coverage and makes it possible for employers to offer more generous benefit packages. Because the private sector funds over 80 percent of prescription drug spending, rising prescription drug expenditures is a major contributor to these rates of growth. Private sector spending increases account for 82.0 percent of total statewide growth (Figure ES-2).

Figure ES-2 Sources of Expenditure Growth 1998-1999 By Payer



***Enrollment changes did not follow Maryland's historical trend of ever increasing HMO membership in 1999, although enrollment changes paralleled expenditure variations for most government and private payers.*** HMO enrollment and expenditures declined slightly in the private market and were down more significantly for seniors under Medicare+Choice. The Medicaid program experienced 11 percent growth in both HealthChoice expenditures and enrollment. By year-end, the vast majority of Medicaid beneficiaries obtained care through the HealthChoice program. Maryland's decline in private HMO enrollments may precede a national trend: InterStudy reported a drop in total HMO enrollment in the U.S. from January 1, 1999 to January 1, 2000. The lack of growth in private HMOs is attributable to several factors, including adverse publicity regarding HMOs and the blurring of differences between HMOs and other traditional products. HMO enrollment declines may also reflect a movement from fully-insured products to self-insurance for some larger firms. Nationwide, rising HMO costs have spurred employers to shift to insurance plans that do not entail the high administrative costs of managed care. Big companies are also de-emphasizing point-of-service plans and instead implementing efforts to shift employees into preferred provider organizations for which they can self-insure.<sup>6</sup> ***Among non-HMO products, private sector enrollment increased by 4.4 percent and expenditures jumped 12.3 percent.***

<sup>6</sup> Freudenheim, Milt. "H.M.O. Costs Spur Employers to Shift Plans." The New York Times, September 6, 2000.

Key findings for the major health care payer categories are summarized as follows.

- ***Medicare expenditures increased by 1.4 percent in 1999 bringing total Medicare expenditures to \$3.8 billion. In contrast, Medicare increased by 4.6 percent nationally.*** In Maryland, enrollment in original Medicare grew by 1.9 percent, but Medicare+Choice enrollment declined by 3.1 percent reflecting the decision of several commercial HMOs to abandon parts or all of the Maryland market in 1999. Program-wide, the average per capita spending (including OOP) for a Maryland Medicare beneficiary was nearly flat, rising only from \$6,365 in 1998 to \$6,373 in 1999. Programmatic changes brought about by the Balanced Budget Act of 1997 reduced Medicare reimbursement for various covered services in 1999.
- ***Medicaid expenditures were up 2.6 percent in 1999, from \$2.7 billion to \$2.8 billion.*** Medicaid HealthChoice spending increased 11.2 percent, but spending via the traditional product declined by 1.5 percent. Both of these results are consistent with enrollment changes experienced by the two delivery systems. Direct per capita spending program-wide declined 7.7 percent from \$6,218 in 1998 to \$5,617 in 1999. Continuing enrollment of children in HealthChoice due to the Children's Health Insurance Program (CHIP) may have contributed to this decline since children are much less expensive to cover than older adults and pregnant women.
- ***Expenditures by private insurers and other third parties increased by 12.3 percent, but spending by private HMOs fell by 1.4 percent.*** Direct per capita expenditures (including OOP) grew by 6.7 percent from \$2,218 in 1998 to \$2,366 in 1999 reflecting the increasing demand for services and increasing costs for HMOs.
- ***Patient out-of-pocket spending grew by 4.0 percent and this category accounted for 17.4 percent of total spending in 1999, essentially unchanged from 1998.*** Aside from prescription drug OOP payments which increased by 17.6 percent and nursing home OOP spending which grew by 6.0 percent, all other categories of OOP spending grew by less than the overall state average (4.6 percent) suggesting that increases in health care spending were not disproportionately shifted to patients. Federal action to provide seniors with prescription drug coverage could slow the growth in this sector, but the accelerating growth in private payer expenditures is expected to result in accelerated OOP growth due to increased numbers of uninsured workers and higher deductible and coinsurance requirements.

## **REGIONAL HEALTH CARE EXPENDITURES**

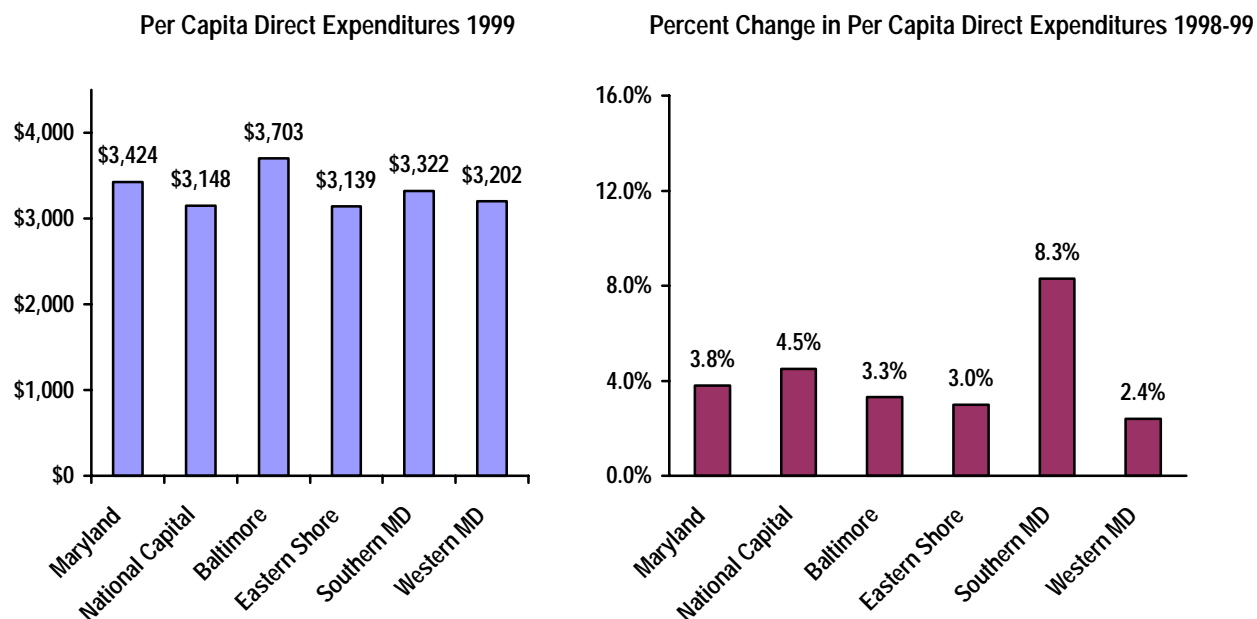
Significant differences exist between the proportion of the population living in a region and the proportion of state health care expenditures spent on that population due to the complex interaction of demographics, income, underlying health status, and available health resources.<sup>7</sup> The National Capital Area constitutes 31.6 percent of the population of the state but this region accounts for 29.0 percent of health care expenditures. Conversely the Baltimore Metropolitan Area represents 47.4 percent of state population and uses 51.2 percent of expenditures. Compared to 1998, this region

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<sup>7</sup> Regional Breakdown: The National Capital Area consists of Montgomery and Prince George's counties; Baltimore consists of Anne Arundel, Baltimore, Carroll, Harford, and Howard counties, and Baltimore City; the Eastern Shore is composed of Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties; Southern Maryland includes Calvert, Charles, and St. Mary's counties; and Western Maryland includes Allegany, Frederick, Garrett, and Washington counties.

expanded its share of state spending although its share of population declined slightly. The less urbanized portions of the state, including Western Maryland, Southern Maryland, and the Eastern Shore, use smaller shares of health care services than their shares of the state population.

**Figure ES-3: Regional Health Care**



As shown in Figure ES-3, differences between the regional population and spending distributions are reflected in regional variations in per capita spending. The Baltimore Metropolitan Area has the highest direct expenditures per capita at \$3,703. The four remaining regions have direct expenditures per capita ranging from \$3,139 for the Eastern Shore to \$3,322 for Southern Maryland. Figure ES-3 also presents the per capita direct spending rates of growth for the regions between 1998 and 1999. Two regions had significantly higher rates of increase: per capita spending in the National Capital Area increased 4.5 percent in 1999, while per capita spending in Southern Maryland went up 8.3 percent. The dramatic increase in Southern Maryland is attributable to several factors. This region experienced declines in Medicare+Choice and private HMO enrollments in 1999 of about 25 percent. Southern Maryland also experienced a climb in average per capita income of almost 10 percent and enjoyed an 18 percent reduction in the number of uninsured.

## CONCLUSIONS

Strong economic growth in 1999 enabled consumers and employers to keep pace with accelerating health care spending. The 1999 increase continues an upswing first noted in 1998 with sharply higher spending for drugs and a moderate increase for physician services, but small or negative changes in other spending categories. The private sector continues to fund a growing share of health care services as a strong economy keeps unemployment low and puts more individuals in a position to purchase employer-sponsored insurance. Strong income growth has enabled consumers to pay the co-insurance and deductibles associated with private health care coverage. However, out-of-pocket spending increased more slowly than other private health care spending in the state indicating

that that employers and other purchasers have so far been willing to absorb a higher share of overall expenditures.

The 7.4 percent increase in private payer expenditures continues the trend of escalating health care expenditures in the private sector. This increase is consistent with the significant premium increases now being reported in the Maryland market. Recent national estimates show health insurance premiums rising significantly, up 8.3 percent in 2000 according to a recent estimate.<sup>8</sup> Employers have been willing to absorb the higher costs over the last several years, but with the economy weakening in 2001, future premium increases may be shifted to enrollees. Growing costs of insurance premiums are often the cited reason for declining coverage.<sup>9</sup> Larger increases in premiums could further erode the ability of workers to afford health insurance.

Rising prescription drug expenditures is a particularly perplexing trouble spot for purchasers, payers, and consumers. Results from 1999 indicate that various cost-cutting measures by payers have done little to slow drug expenditure growth. Rising drug expenditures need not trigger alarm if prescription drugs offset other forms of health care or dramatically improve the quality of life for individuals where no viable treatment was previously available. Little research has been done to estimate the value of offsetting services or the cost of future care that has been delayed or avoided, however. A major challenge for policymakers in crafting drug benefits will be to capture discounts, while minimizing a surge in utilization that could drive drug expenditures even higher.

Individuals without prescription drug benefits and vulnerable populations may bear a disproportionate share of rising expenditures. Although the pharmaceutical industry is quick to point out that prescription drug prices increased modestly (3.1 percent) in 1999, drugs commonly used by vulnerable populations may be increasing more rapidly in price. A Families USA study found that over half the fifty most heavily prescribed drugs for seniors increased at two or more times the rate of inflation.<sup>10</sup> The same study found that the differential between the retail price paid by a senior without prescription benefits and the discounted price paid by a senior with drug benefits rose from 8 to 15 percent in 1999.

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<sup>8</sup> Christopher Hogan, Paul B. Ginsburg, Jon R. Gabel Health Affairs, 'Tracking Health Care Costs: Inflation Is Back', Health Affairs, Vol. 19, No. 6 (November/December 2000): 217-223.

<sup>9</sup> See The Uninsured in America – 1997. Rockville MD: Agency for Health Care Policy and Research; 1999. *MEHighlights No. 10*. AHCPH Pub. No. 99-0031; Agency for Health Care Policy and Research. Who declines employer-sponsored health insurance and is uninsured? Issue 23, November 1999. Center for Health System Change.

<sup>10</sup> Families USA, "Still Rising: Drug Price Increases for Seniors 1999-2000", (Washington DC: April 2000).



## 1. STATE HEALTH CARE EXPENDITURES

This chapter discusses the fundamental issues addressed by the 1999 Maryland State Health Expenditure Accounts (SHEA). That is, what are statewide expenditures on health care and how have those expenditures changed from 1998? It also examines how those expenditures are distributed by type of service. As in previous years, the SHEA aggregates health expenditures into five major categories describing source of payment:

1. Medicare (subdivided into *Original Medicare* and Medicare managed care known as *Medicare+Choice*)
2. Medicaid (subdivided into *Traditional Medicaid* and Medicaid managed care known as *HealthChoice*)
3. Other government (non-Medicare and non-Medicaid) sources that include state and local governments
4. Private Coverage (subdivided into *Insurers and Self-funded plans* and *Private Health Maintenance Organizations [HMOs]*)
5. Out-of-Pocket (OOP) spending by individual Maryland residents

**Health care expenditures in Maryland rose by 4.6 percent in 1999, increasing to \$19.1 billion from \$18.2 billion in 1998** (Table 1-1). This rate of increase is slightly less than the 5.3 percent growth rate reported in the SHEA last year.<sup>1</sup> It is also less than the estimated national rate of increase in health care spending from 1998 to 1999, which is 6.4 percent.<sup>2</sup> While current rates of increase are far below the rapid growth seen in the late 1980s and early 1990s,<sup>3</sup> the rate of increase in health care expenditures nationally is expected to increase even further.<sup>4</sup>

**The 4.6 percent rate of growth in overall statewide spending masks substantial differences in growth rates across the types of spending reported in the SHEA.** Physician expenditures, which at \$4.9 billion is the largest single component of the SHEA, rose 5.1 percent from 1998 to 1999. Inpatient hospital spending, which is the second largest component of the SHEA with \$4.6 billion, increased 2.4 percent during the same time period. Spending on outpatient hospital services such as same-day surgeries, colonoscopies and other minor procedures, and emergency room visits went up 1.5 percent.

<sup>1</sup> State of Maryland, Maryland Health Care Commission. *State Health Care Expenditures: Experience from 1998*. January 2000.

<sup>2</sup> Health Care Financing Administration. Payor Source Categories are generally defined by National Health Expenditures (NHE) Report with the following exceptions: Private or federal "Other" payers are excluded; Medicaid is defined as the sum of federal, state, and local government payments. Spending categories are also as defined by NHE Report with the following exceptions: "Other Professional Services" category includes dental services. "Other Services" category includes vision products and other medical durables. NHE categories omitted from this table include: (1) (entire categories) Other personal health care, government public health activities, research, and construction; (2) non-prescription drugs and medical sundries (NHE includes with prescription drugs to make "medical nondurables"). <http://www.hcfa.gov/stats/NHE-Proj/proj1998/tables/nhe65-08.csv> (December 1, 2000).

<sup>3</sup> Health Care Financing Administration. National Health Expenditures, by Source of Funds and Type of Expenditure: Selected Calendar Years 1993–98. <http://www.hcfa.gov/stats/NHE-oact/tables/t3.htm> (December 1, 2000).

<sup>4</sup> Smith, S., Heffler, S., Freeland, M., and others. et al., The next decade of health spending: A new outlook. *Health Affairs* 1999 18(4), pp. 86–95.

**Table 1-1: Maryland State Health Care Expenditures Account (SHEA):  
Total Maryland Expenditures (\$000s) and Rate of Growth by Service Type, 1998–1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR			PRIVATE SECTOR		TOTAL 1999 EXPENDITURES	TOTAL 1998 EXPENDITURES	PERCENT CHANGE 1998-1999
	Medicare	Medicaid	Other Gov't	Private Coverage	Out-of-Pocket			
<b>Total Health Expenditures</b>	<b>\$3,797,447</b>	<b>\$2,862,451</b>	<b>\$860,577</b>	<b>\$8,252,873</b>	<b>\$3,320,379</b>	<b>\$19,093,727</b>	<b>\$18,248,210</b>	<b>4.6%</b>
Hospital Services								
Inpatient	1,828,785	650,403	181,947	1,862,248	106,526	4,629,910	4,519,325	2.4
Outpatient	438,795	182,268	47,262	830,281	132,644	1,631,249	1,606,450	1.5
Physician Services	864,214	419,652	118,851	2,761,231	810,299	4,974,247	4,731,034	5.1
Other Professional Services	99,099	243,427	348,807	368,829	919,311	1,979,473	1,994,714	-0.8
Prescription Drugs	20,477	273,808	82,471	1,237,871	586,559	2,201,187	1,801,773	22.2
Nursing Home Care	164,791	628,951	21,793	19,178	396,076	1,230,788	1,186,824	3.7
Home Health Care	123,071	269,130	3,052	96,997	168,690	660,940	684,405	-3.4
Other Services	106,501	21,233	23,723	49,398	200,275	401,129	422,737	-5.1
Admin. & Net Cost of Insurance	151,713	173,580	32,672	1,026,839	-----	1,384,805	1,300,948	6.4

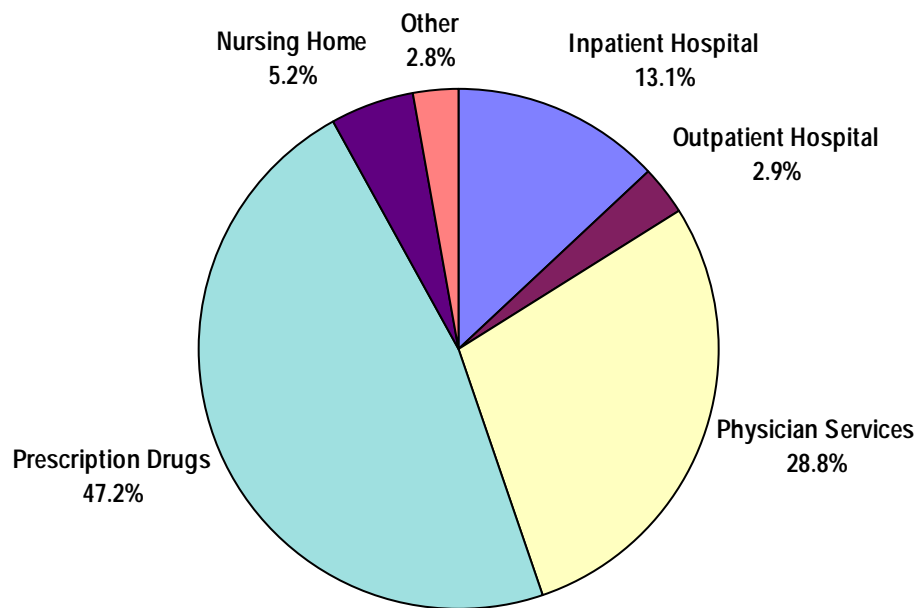
NOTE: Whenever possible, estimates presented in this table are based upon data obtained directly from Maryland sources. The distribution of expenditures by type of service for both Medicare HMO and out-of-pocket (OOP) spending are based upon national data sources. Similarly, the distribution of private HMO spending by type of service was used to estimate the same distribution for Medicaid HealthChoice spending. Such estimates, which reflect reasonable approximations, should be interpreted with some caution.

**The most rapidly growing component of the SHEA is expenditures on prescription drugs, which rose 22.2 percent from 1998 to 1999 according to Table 1-1.<sup>5</sup>** The growth in spending on prescription drugs was rapid enough that prescription drug expenditures now exceed spending on other professional services. For the first time in 1999, prescription drugs represent the third largest component of the SHEA.

Another way to understand what factors contribute to increases in statewide spending is to examine the relative contribution of different types of services to the overall growth in statewide health spending (Figure 1-1). **Almost half (47.2 percent) of the increase in spending is attributable to prescription drugs.** Increases in spending on physician services account for another 28.8 percent, which means that these two factors together account for more than three-quarters (76.0 percent) of the overall increase in statewide spending. Inpatient hospital services, which are associated with almost one-third of all spending in the state, contribute 13.1 percent to the increase, as shown in Figure 1-1. Taken together, these figures illustrate a general trend in Maryland away from the use of inpatient services and greater reliance on drug therapies, physician services, and other forms of health services. This trend is fueled by an increasing availability of pharmaceutical therapies and explicit efforts on the part of almost all payers to shift the delivery of services into outpatient settings whenever it is clinically appropriate.

<sup>5</sup> Appendix Table 1B presents 1998 information comparable to that reported in Tables 1-1 and Appendix Table 1A for 1999.



**Figure 1-1: Contributions of Specific Services to Statewide Growth Rate**

Note: "Other" includes Home Health Care, Other Professional Services, Other Services, and Administration/Net Cost of Insurance, statewide growth totaled \$845,517,000 in 1999.

### ABOUT MARYLAND'S HEALTH CARE EXPENDITURE ACCOUNTS

Data to support these accounts were gathered from many sources, including annual financial reports submitted by payers to the Maryland Insurance Administrator (MIA). Additional information was obtained from the Health Care Financing Administration (HCFA) and Maryland's Medicaid Program, administered by the Department of Health and Mental Hygiene (DHMH). Data used to develop the account of other government expenditures were obtained and analyzed from Maryland's Department of Corrections, DHMH state and local program budget documents, DHMH state hospital budget documents, U.S. Department of Veterans Affairs, and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Additionally, data from two state-funded programs, the Pharmacy Assistance Program and the AIDS Insurance Assistance Program, were included in this payer category.

To the extent possible, MHCC collected expenditure data for health services that were rendered in calendar year 1999. Private indemnity insurers and HMOs report expenditures by date of incurred services to the MIA for each calendar year. Some secondary data from payers were only available in forms that did not conform to the 1999 service period. Data on state and county health department health expenditures, including Medicaid, are organized by the date payment was made to the provider and are summarized by fiscal year (July 1 to June 30). For those expenditures, the average of state fiscal years 1999 and 2000 (which includes the last 6 months of calendar year 1999) was used to estimate calendar year 1999 expenditures. Because these data reflect when payment was made, a small portion of the expenditures reported here for 1999 actually occurred in late 1998. This is balanced somewhat by the fact that some services delivered in late 1999 were not captured because payment was not actually made until 2000.

OOP expenditures are made by insured individuals to pay for coinsurance and deductibles on services and by individuals and philanthropic organizations to pay for non-covered goods and services. Non-covered services include not only those services consumed by individuals without insurance coverage, but also services not covered under health plans of insured individuals. OOP spending does not include spending for premiums that

fund health insurance. National OOP expenditure information and its relation to total personal health expenditures were used to estimate Maryland's total OOP spending for 1999.

Enrollment information was gathered for each source of insurance coverage and delivery system to facilitate analysis of spending trends. These data also were used as the basis for determining the denominators for per capita expenditures reported in chapter 2. It is important to note that about 55,000 Medicaid enrollees also were dually enrolled in the Medicare Program in 1999. This group receives services from both programs, but they are counted as Medicare enrollees. In addition, an attempt has been made to net their Medicaid spending of the Medicaid totals reported here whenever comparisons are made between spending by Medicare and Medicaid beneficiaries. The total enrollments shown in tables and represented in graphs in this chapter represent the total for the three major sources of insurance coverage. Coverage by CHAMPUS or enrollments in single benefit programs, such as dental insurance, are not included in total enrollment.

Because the development of a state system for reporting health expenditures is an ongoing process, the Commission continues to refine its methodologies for estimating state health expenditures. At the same time, year-to-year consistency in method and format is required in order to identify trends. To make 1998 to 1999 comparisons with confidence that trends are due to changes in health care delivery and financing, rather than changes in methodology, MHCC has adjusted the 1998 health expenditure accounts using improvements developed for 1999. Where it is not possible to develop 1998 data consistent with 1999 methodologies, no attempt is made to compare the two years.

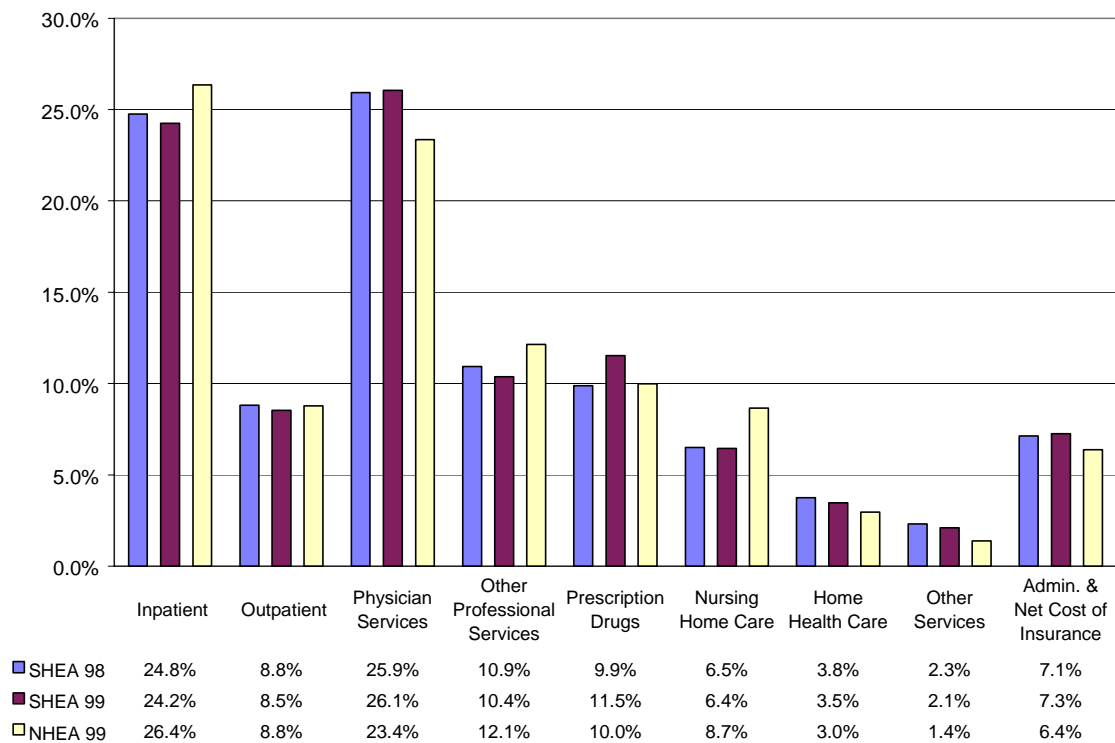
The 1999 SHEA incorporates the following changes:

- Nearly all Medicare indemnity expenditures are estimated directly from claims data.
- Enrollment by Maryland residents in managed care organizations that are regulated outside of Maryland are measured directly from national data sources.
- National information on the distribution of Medicare+Choice expenditures across types of service is used to estimate the distribution of Medicare+Choice spending in Maryland.

These refinements were incorporated into both the 1998 Revised SHEA (Appendix Table 1B) and 1999 SHEA (Table 1-1 and Appendix Table 1A).

Figure 1-2 compares the statewide distribution of health spending across service categories in 1998 (SHEA 98) and 1999 (SHEA 99). It also compares the statewide distribution of health spending in 1999 with the national distribution reported in the estimated 1999 National Health Expenditure Accounts (NHEA 99).<sup>6</sup> Figure 1-2 suggests that the overall distribution of health care spending in the state did not change dramatically from 1998 to 1999, except for the increase in prescription drug expenditures. Maryland's overall distribution of health care dollars by service category is also similar to national figures in most categories. Generally speaking, Maryland spends a slightly smaller proportion of total expenditures than the national average on hospital, other professional, and nursing home services. Lower hospital spending may reflect the impact of hospital rate regulation in Maryland, which is designed to limit spending on hospital services. On the other hand, Maryland residents spend a greater proportion of their dollars on physician services and prescription drugs. These differences may also be due to the relatively high HMO penetration in Maryland, as HMOs tend to use a lower proportion of inpatient services and to offer prescription drug coverage. However, most of these differences are small enough that they may not be consequential, given differences in the way the SHEA and the NHEAs are constructed.

<sup>6</sup> Health Care Financing Administration. National Health Expenditures, by Source of Funds and Type of Expenditure: Selected Calendar Years 1993–98. <http://www.hcfa.gov/stats/NHE-oact/tables/t3.htm> (December 1, 2000).

**Figure 1-2: Where Did Maryland's Health Dollar Go in 1998 and 1999?**

According to Table 1-2, this year's 4.6 percent growth in total expenditures is the result of changes in several factors. About half of the overall growth is due to general medical inflation. From 1998 to 1999, the Consumer Price Index for medical care rose 2.4 percent in the Baltimore/ Washington DC Metropolitan Statistical Area (MSA), compared to 3.5 percent nationally.<sup>7</sup> Another 0.7 percent is attributable to population growth. The remaining increase (2.1 percent) is due to a variety of factors that most likely include increased enrollment in government programs and increases in the demand for services associated with an aging population. Rising discretionary spending, driven by growing personal income, may also contribute to expenditure growth.

**Table 1-2: Components of 1998–1999 Expenditures Growth**

Medical Inflation	2.4%
Population Growth	0.7
Other Factors	1.5
<b>Total Increase In Expenditures</b>	<b>4.6</b>

<sup>7</sup> Based on the Consumer Price Index for all urban consumers (CPI-U) as compiled by the Bureau of Labor Statistics (BLS). BLS provides a convenient reporting mechanism for the CPI-U and its components at <http://www.bls.gov/cpihome.htm>.

## Difficult Choices Ahead on Prescription Drugs

Rising prescription drugs costs have generated considerable public interest and policy discussion in recent years. The reasons for increased interest include:

- Expenditures on prescription drugs have been increasing at a faster rate than other health care expenditures since 1992.
- People pay a substantial portion of prescription drug costs out of their own pockets; original Medicare and some private health insurance policies do not cover prescription drugs.
- In response to the rapidly increasing costs of prescription drugs many private health plans have altered their coverage of prescription drugs by instituting formularies<sup>1</sup> and “triple-tiered” benefit structures that require different co-payments for generic drugs, preferred brand name drugs, and for other brand name drugs.
- The development of new pharmaceuticals has accelerated in recent years, driven by increased R&D spending, new technologies, a streamlined review process by the Food and Drug Administration (FDA), and a growing interest in less invasive medical treatments.<sup>2</sup>
- The length of patent protection for brand name drugs – established before the FDA implemented expedited review – gives drug companies the opportunity to maintain prices above competitive levels for years by delaying the entry of generic competitors. Pharmaceutical companies also extend the term of patent protection by obtaining a new patent for a slightly different formulation of the drug just prior to expiration of the original patent (a practice known as “evergreening”). As a result, substitution of generic drugs for more expensive branded medication stalls.

### Accelerating Growth in Expenditures

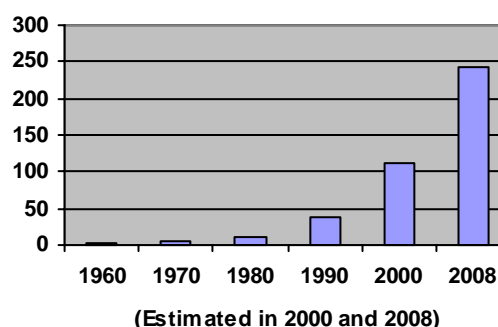
Expenditures on prescription drugs is the fastest growing component of the SHEA in 1999, increasing 22.2 percent versus a 4.6 percent rise in total statewide spending from 1998. A White Paper produced by the Kaiser Family Foundation, “Medicare and Prescription

<sup>1</sup> A formulary is a list of drugs that are approved for use by enrollees of a health plan. Drugs on the formulary are more completely reimbursed by the health plan than other drugs. The effect is to direct the beneficiaries of the health plan to use generic drugs, or brand name drugs that are less expensive for the health plan.

<sup>2</sup> “Chapter 1: Medicare Beneficiaries and Prescription Drug Coverage,” Report to Congress: Selected Medicare Issues. Washington, DC: Medicare Payment Advisory Commission, June 2000.

Drugs”, reported that pharmaceuticals were also the fastest growing component of national health expenditures in 2000, continuing to increase at 11 percent per year, compared with 7 percent for physician services and 6 percent for hospital care. This will increase the percentage of health care expenditures going to prescription drugs from 7.2 percent in 1997 to an estimated 11.2 percent in 2008. The following table shows actual and projected spending for prescription drugs, as estimated by the Office of the Actuary, Health Care Financing Administration.

**National Expenditures on Prescription Drugs (In Billions)**



### Growing Patient Payments

Patients -- particularly seniors insured under Medicare -- face mounting burdens in paying for prescription drugs. A Families USA study found that the 50 drugs most commonly used by seniors increased in price at twice the rate of inflation from January 1999 to January 2000.<sup>3</sup> Evidence also suggests that the population without drug coverage pays a growing share of these price increases due to rising pressure for discounts from institutional purchasers. A HHS study found that from 1996 to 1999 the price differential for seniors with and without prescription drug coverage rose from 8 to 15 percent.<sup>4</sup>

### Burdens on Insurers

State Medicaid programs feel the burden of increased spending for prescription drugs. Medicaid, in contrast to Medicare, extends prescription drug coverage to their beneficiaries. From 1990 to 1997 the annual rate of growth in Medicaid prescription drug payments was 15 percent.<sup>5</sup> For all payers the annual rate of growth was

<sup>3</sup> Families USA, “Still Rising: Drug Price Increases for Seniors 1999-2000”, (Washington DC: April 2000)

<sup>4</sup> Department of Health and Human Services, “Prescription Drug Coverage, Spending, Utilization and Prices”, (Washington DC: DHHS, April 2000)

<sup>5</sup> David K. Baugh, M.A., Penelope L. Pine, Steven Blackwell, Ph.D., J.D., R.Ph., “Trends in Medicaid Prescription Drug

11.1 percent. This trend has continued, and is projected to result in large increases in Medicaid expenditures in the coming decade.

Many Medicaid programs and private health plans are attempting to control their prescription drug expenditures by the use of formularies. Private third party payers have borne the brunt of the increases in prescription costs, having absorbed two-thirds of the increase in drug spending between 1992 and 1997. However, many experts believe that this situation is now changing, and that third party payers will be taking action to reduce their prescription costs by dramatically increasing co-payments and by raising premiums for plans with relatively full drug coverage.<sup>6</sup>

### Expanding Research

Spending on research and development (R&D) for pharmaceuticals has been growing at a high rate for the past two decades, with an annual growth rate of 14 percent.<sup>7</sup> These investments have resulted in a large increase in the number of products under development -- a 50 percent increase over the past 5 years. New technologies have had the effects of both speeding up the testing of potential new drugs and opening new avenues for research. At the same time, the FDA has added reviewers and streamlined its review process so that drugs can be reviewed, approved, and brought to market much faster than previously. In 1999 the FDA approved 83 new drug applications, up from 22 a year in the 1980s, and 37.5 a year between 1995 and 1998.<sup>8</sup> Products that are considered to be of exceptional public health value are processed very rapidly, with the 28 products so classified in 1999 having a median approval time of only 6 months.

While drugs are under patent the manufacturer basically has a monopoly on the production of that drug. If no effective alternatives exist, the manufacturer can charge much more for the drug than could be charged if a competitive market was in operation. The Congress has enacted several laws to extend the patent protection provided to brand name drugs, ostensibly to provide greater incentives for pharmaceutical companies to develop new drugs. These laws have increased the

effective patent life of drugs by about 50 percent over the past 20 years. Drug companies have been one of the most profitable industries over this time period.

### The Effect of Direct Marketing

Direct marketing of brand name drugs to the public has become an accepted means to build name recognition for a treatment and to generate sales. In 1999 drug companies spent \$1.8 billion in advertising, up from \$55 million in 1999.<sup>9</sup> The drugs advertised in this manner have resulted in a large proportion of increase in spending on prescriptions, with the 25 top selling advertised drugs accounting for over 40 percent of the increase in spending.

### Estimating the Savings

Some drug manufacturers argue that the new drugs coming on the market are cost effective, since they may substitute for more other expensive treatment options, or reduce future expenditures. However, it is very difficult to evaluate these claims, particularly if the drug is substituting for another drug that is already on the market and the new drug is simply considered to be more effective. An example to illustrate this difficulty is the clot-buster drugs used to treat heart attacks. In the late 1980's, tissue plasminogen activator (TPA) was initially marketed as a more effective treatment than streptokinase, a competing product sold at a significantly lower price. Recent studies now suggest that streptokinase is equally effective.

Even more difficult to evaluate are drugs that are taken on an ongoing basis as preventive measures. Estrogen replacement therapy for post-menopausal women has been shown to reduce the risk of heart disease and osteoporosis, however endometrial (uterine lining) cancer has been linked to the use of estrogen. This drug treatment is relatively low-cost (less \$200 per year) and could benefit a large share of the female population over 50. Estrogen therapy is a long-term treatment and potential benefits, if any, will not be apparent for years, or even decades. In addition, it is uncertain in the long term whether such therapies might have adverse side effects, which could increase total health care costs. This problem will become even more important as drug companies are concentrating some of their research on treatments for chronic and disabling diseases, in response to the aging of the population. The result is likely to be drugs that improve the quality of life, but which are cost increasing, with little or no offsetting savings elsewhere in the health care system.

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Utilization and Payments, 1990-1997, Health Care Financing Review, Spring 1999. Table 7.

<sup>6</sup> Barents Group LLC, "Factors Affecting the Growth of Prescription Drug Expenditures", July 9, 1999, NIHCM Foundation, <http://www.nihcm.org/FinalText3.pdf>

<sup>7</sup> Mitchie I. Hunt, Ph.D., Prescription Drugs and Intellectual Property Protection: Finding the Right Balance Between Access and Innovation, August 2000, NIHCM Foundation.

<sup>8</sup> Food and Drug Administration's Report on New Health Care Products Approved in 1999, <http://www.fda.gov/bbs/topics/ANSWERS/ANS00998attachmets/cder.html>.

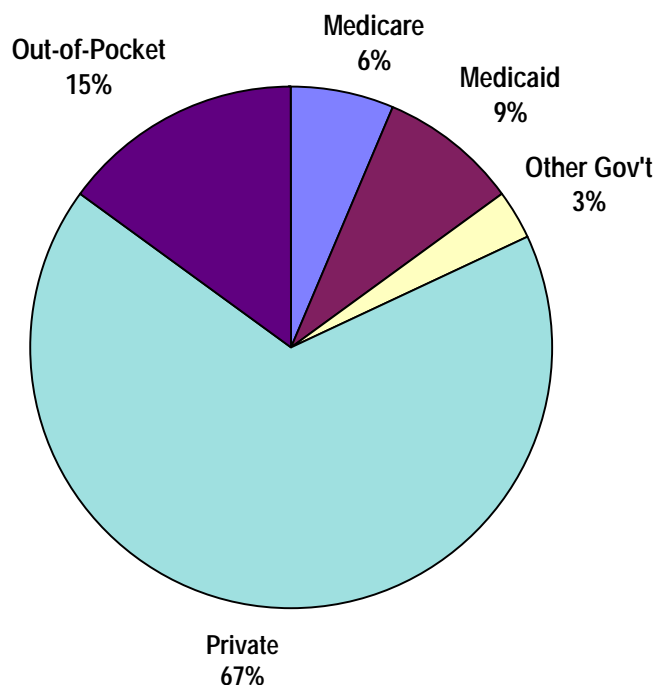
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<sup>9</sup> Steven Findlay, MPH, Prescription Drugs and Mass Media Advertising, September 2000, NIHCM Foundation.

## ***EXPENDITURES BY SOURCE OF PAYMENT***

This section describes the distribution of total expenditures by source of payment, looking at total dollar amounts and percentages of the total health care expenditures, as well as the distribution of payer expenditures among the various services. It focuses specifically on the portion of expenditures paid by Medicare, Medicaid, and private health plans. This section also describes how expenditure patterns have changed from 1998 and how expenditures vary by type of service and source of coverage.

**Figure 1-3: Composition of Statewide Growth by Source of Payment, 1999**



NOTE: Statewide growth totaled \$845,517,000 in 1999.

**Two-thirds (67 percent) of the growth in statewide spending is the result of spending by private insurers, self-funded plans, and private HMOs, as illustrated in Figure 1-3.**

The leading role played by private third parties clearly reflects the strong economy in 1999, which tends to increase the number of people with privately sponsored coverage and makes it possible for employers to offer more generous benefit packages. The OOP spending by patients is the second most rapidly increasing funding source. Because private insurance typically involves deductibles and copayments, it should not be surprising to find that increases in reimbursements by private third parties are correlated with increases in payment by the individuals that they cover.

**Public payers experienced a lower rate of growth in health expenditures in 1999 than private payers, as reported in Table 1-3.** Aggregate government expenditures increased 2.1 percent, while total private expenditures increased 6.4 percent. These growth rates continue the pattern from last year, in which the growth rate for expenditures with private coverage exceeded the statewide average and the growth of public spending. In addition to the economic factors that have stimulated private coverage and reduced the number of people eligible for public programs, the relatively slow growth of spending by government payers is attributable to several specific policy

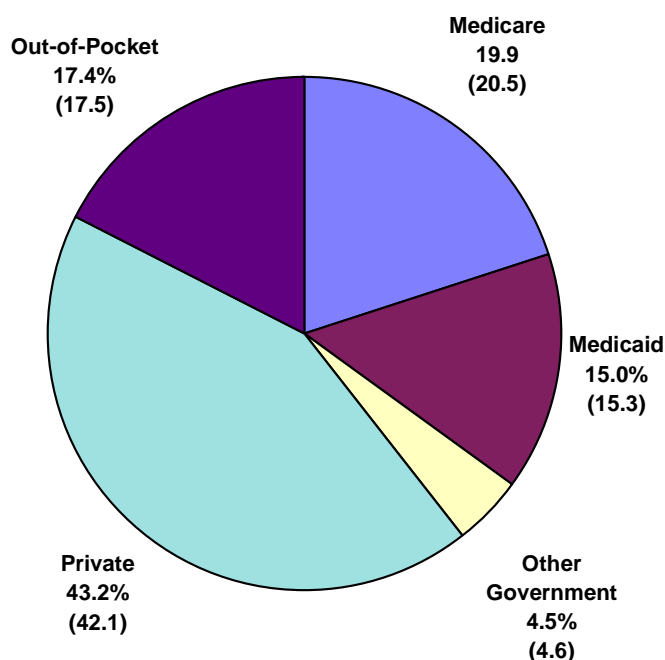
initiatives. For example, the Balanced Budget Act of 1997 (BBA) was designed among other things to limit expenditures under federally financed health care programs such as Medicare and Medicaid. The first full year of BBA implementation was 1999. At the state level, Maryland extends the benefits of managed care to Medicaid beneficiaries through the HealthChoice program. By 1999, the vast majority of Medicaid beneficiaries obtained care through the HealthChoice program.

**Table 1-3: Maryland's Health Expenditures (\$000s), Government and Private Sector: 1998–1999**

	GOVERNMENT SECTOR				PRIVATE SECTOR			TOTAL
	Medicare	Medicaid	Other Gov't	Total Gov't	Private Coverage	Out-of-Pocket	Total Private	
1998	\$3,744,296	\$2,789,578	\$834,019	\$7,367,893	\$7,687,817	\$3,192,500	\$10,880,317	\$18,248,210
1999	3,797,447	2,862,451	860,577	7,520,476	8,252,873	3,320,379	11,573,252	19,093,727
% Change 1998–99	1.4%	2.6%	3.2%	2.1%	7.4%	4.0%	6.4%	4.6%

Despite these differential rates of growth, the proportion of health care spending by type of payer did not change substantially from 1998 to 1999 (Figure 1-4). Private coverage accounts for 43.2 percent of statewide expenditures in 1999, up slightly from 42.1 percent in 1998. Overall the private sector (private coverage plus out-of-pocket) accounts for 60.6 percent of health expenditures in the Maryland in 1999, compared to 59.6 percent in 1998. Medicare — the largest government payer — funded 19.9 percent of all expenditures in 1999, while Medicaid paid for 15.0 percent of expenditures. Both of these figures are down slightly from 1998, when Medicare accounted for 20.5 percent of spending and Medicaid, 15.3 percent.

**Figure 1-4: Where Did the Maryland Health Dollar Come from in 1999 (1998)?**



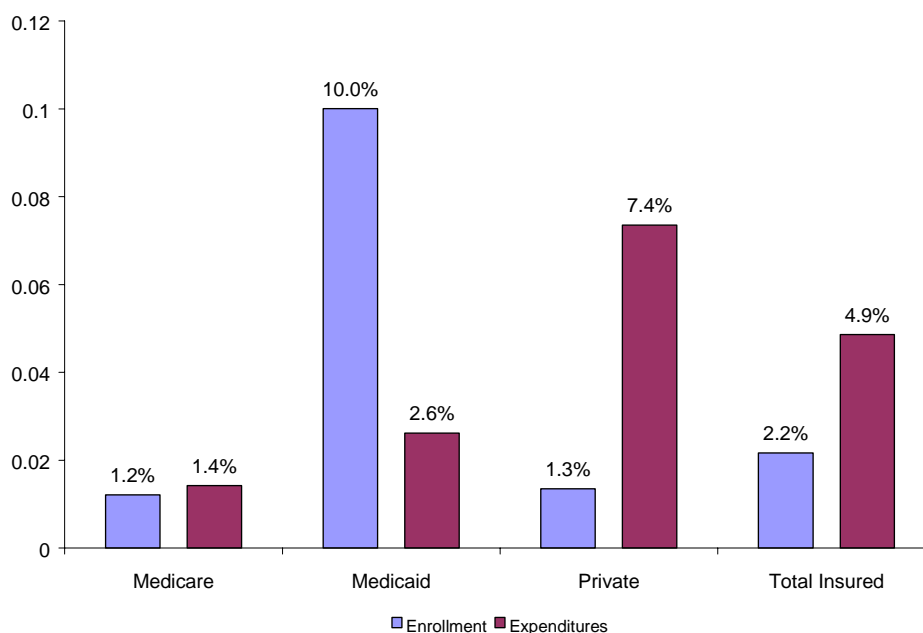


**The expanding private sector in Maryland, accompanied by a relative decline in public spending, is consistent with developments nationally according to estimates presented in Table 1-4.** As in Maryland, the national growth in spending covered by private third parties increased rapidly from 1998 to 1999, substantially exceeding the rise in spending by public programs. Increases in OOP spending also exceeded rates of change in public programs but fell short of the growth in spending with private coverage. Taken together, these estimates are consistent with the notion that a strong economy and low unemployment, both nationally and in Maryland, contribute to expanding private coverage and create less reliance on public programs such as Medicare and Medicaid.

**Table 1-4: Estimated Rates of Change in Spending, 1998–1999  
by Source of Payment in Maryland and the United States**

	GOVERNMENT SECTOR		PRIVATE SECTOR	
	Medicare	Medicaid	Private Coverage	Out-of-Pocket
Maryland	1.4%	2.6%	7.4%	4.0%
United States	4.6%	4.2%	8.6%	6.1%

**Figure 1-5: Percent Change in Total Enrollment and Expenditures by Source of Coverage: 1998–1999**



**The number of people with Medicare or private coverage increased modestly from 1998 to 1999, while Medicaid enrollment grew substantially during the same period.** As illustrated in Figure 1-5, Medicare beneficiaries increased 1.2 percent in 1999, while the number of individuals with private coverage grew 1.3 percent. In contrast, the Medicaid population grew 10.0 percent according to data provided by the Maryland Department of Health and Mental Hygiene, which administers the state Medicaid program. **However, changes in enrollment do not necessarily translate directly into changes in spending.** In fact, private insurance had the largest increase in expenditures (7.4 percent), despite its relatively small increase in enrollment. In contrast, Medicaid



spending rose only 2.6 percent despite the large increase in enrollment. Differences between the rates of growth in enrollment and spending are due to a number of factors, including changes in the nature of the benefits offered by different payers and the extent to which payers rely on managed care or HMO-type arrangements to deliver services.

### ***EXPENDITURES BY SOURCE OF PAYMENT AND TYPE OF SERVICE***

This section describes the distribution of expenditures for various services by source of payment. It illustrates how expenditure distributions relate to differences in the populations covered by specific payers and to differences in benefit packages.

**Government programs spend proportionately more on inpatient hospital and long-term care (nursing home and home health services), while private plans spend proportionately more on physician services and prescription drugs (Table 1-5).** While the distribution of dollars spent on various service categories varies widely by payer, these variations reflect differences in payer health plan benefit packages and differences in the health care needs of the population groups associated with payers. For example, as the only payer in either the government or private sector that offers more than post-acute coverage for nursing home services, Medicaid spends a much larger share of its dollars on long-term care services than any other payer. A substantial portion (22.0 percent) of all Medicaid expenditures are for nursing home care, while private third parties spend less than 1 percent of their dollars on nursing home care. Similarly, many private-sector plans offer prescription drug coverage, whereas the original Medicare (non-HMO) benefit package has no prescription drug benefits. For this reason, 15 percent of spending under private coverage is spent on prescription drugs, while government programs spend considerably less (0.5 percent overall for Medicare and 9.6 percent for Medicaid).<sup>8</sup>

**Table 1-5: Distribution of Maryland Health Expenditures by Source of Payment, 1999**

Expenditure Components	Medicare	Medicaid	Other Gov't	Private Coverage	Out-of-Pocket	Total
<b>Total Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services						
Inpatient	48.2	22.7	21.1	22.6	3.2	24.2
Outpatient	11.6	6.4	5.5	10.1	4.0	8.5
Physician Services	22.8	14.7	13.8	33.5	24.4	26.1
Other Professional Services	2.6	8.5	40.5	4.5	27.7	10.4
Prescription Drugs	0.5	9.6	9.6	15.0	17.7	11.5
Nursing Home Care	4.3	22.0	2.5	0.2	11.9	6.4
Home Health Care	3.2	9.4	0.4	1.2	5.1	3.5
Other Services	2.8	0.7	2.8	0.6	6.0	2.1
Admin. & Net Cost of Insurance	4.0	6.1	3.8	12.4	-----	7.3

<sup>8</sup> The lower percentage of Medicaid expenditures on prescription drugs is due to the diluting effect of the much higher percentages of Medicaid expenditures for nursing home and home health care.

One factor that complicates the construction and interpretation of private expenditure data in the SHEA for both HMOs and non-HMOs is the practice of “carving out” specific services, such as mental health and prescription drugs. The SHEA estimates of private expenditures are based on submissions to the MIA by private insurance companies and by HMOs. To the extent that employers or other groups purchase specialty services directly from providers, the expenditures reported in the SHEA could understate actual spending because such dollars would not flow through insurance arrangements within the jurisdiction of the MIA. A similar problem involves large groups that choose to self-insure for specific services while providing insurance or health plan coverage for the remainder of their health benefits program.

Table 1-6 shows how total expenditures and expenditures on services are distributed among the payers. Comparing the proportion of total expenditures in the state that are covered by a particular payer to that same payer’s proportion for a particular service identifies specific services where a payer’s spending is out of proportion to its overall share of expenditures. Benefit package design and characteristics of the covered population both influence the proportions of spending, as discussed below.

**Table 1-6: Government and Private Expenditures  
as a Percent of Total Service Category Expenditures, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR				PRIVATE SECTOR			TOTAL
	Medicare	Medicaid	Other Gov't	Total Gov't	Private Coverage	Out-of-Pocket	Total Private	
<b>Total Health Expenditures</b>	<b>19.9%</b>	<b>15.0%</b>	<b>4.5%</b>	<b>39.4%</b>	<b>43.2%</b>	<b>17.4%</b>	<b>60.6%</b>	<b>100.0%</b>
Hospital Services								
Inpatient	39.5	14.0	3.9	57.5	40.2	2.3	42.5	100.0
Outpatient	26.9	11.2	2.9	41.0	50.9	8.1	59.0	100.0
Physician Services	17.4	8.4	2.4	28.2	55.5	16.3	71.8	100.0
Other Professional Services	5.0	12.3	17.6	34.9	18.6	46.4	65.1	100.0
Prescription Drugs	0.9	12.4	3.7	17.1	56.2	26.6	82.9	100.0
Nursing Home Care	13.4	51.1	1.8	66.3	1.6	32.2	33.7	100.0
Home Health Care	18.6	40.7	0.5	59.8	14.7	25.5	40.2	100.0
Other Services	26.6	5.3	5.9	37.8	12.3	49.9	62.2	100.0
Admin. & Net Cost of Insurance	11.0	12.5	2.4	25.8	74.2	-----	74.2	100.0

The government sector funds only 39.4 percent of all expenditures in the state (Table 1-6). However, it funds the majority of expenditures for hospital inpatient care (57.5 percent), nursing home care (66.3 percent), and home health care (59.8 percent). The public share of inpatient expenditures is driven largely by the Medicare population, which tends to use proportionately more hospital care than younger populations. In particular, while Medicare funds less than one-fifth of all state health expenditures (19.9 percent), it pays for 39.5 percent of all inpatient services. Similarly, although Medicaid represents only 15.0 percent of total Maryland expenditures, it pays for nearly half of all nursing home and home health expenditures in the state (51.1 percent and 40.7 percent,

respectively). Medicaid pays proportionately less than its total share of expenditures for hospital outpatient, physician, other professional services, and prescription drugs; this is due to the high level of spending on nursing home and home health care.

The private sector funds the majority of health expenditures in the state (60.6 percent), yet it accounts for almost three-quarters of all spending on physician services (71.8 percent) and 82.9 percent of all prescription drug expenditures. Within the private sector, private coverage funds 43.2 percent of all state health expenditures, but it accounts for 55.5 percent of all physician services, 56.2 percent of the expenditures on prescription drugs, and 50.9 percent of outpatient hospital spending amounts.

### ***COMPARISONS BETWEEN HMOs AND OTHER FORMS OF INSURANCE***

Unlike more traditional insurance arrangements, HMOs provide an administrative process that is designed to improve clinical decision making. Combined with financial incentives that are designed to encourage the efficient delivery of services, the growth of HMOs represents a significant change in the organization and financing of health care in Maryland. For this reason, it is important to consider what differences exist in the level and distribution of expenditures by type of delivery system and how these differences have changed over time.

The expenditure patterns shown in Table 1-7 reflect statewide trends in HMO arrangements. In particular, 1999 was marked by a substantial slowdown in the growth of managed care. Medicare HMO (Medicare+Choice) expenditures grew only 0.5 percent from 1998 to 1999, while expenditures by Medicare beneficiaries with the original type of fee-for-service coverage increased by 1.6 percent. In contrast, Medicare+Choice expenditures were reported in last year's SHEA to have increased 52.6 percent from 1997 to 1998, with spending under the original Medicare structure essentially unchanged. In the Medicaid program, managed care (HMO) expenditures rose 11.2 percent from 1998 to 1999, while spending by traditional Medicaid recipients fell by 1.5 percent. This continues the pattern of a year ago, when the SHEA report indicated a 163.7 percent increase in Medicaid HMO spending and an 18.5 percent decline in Medicaid fee-for-service expenditures. However, both the 1999 and 1998 results reflect a significant one-time event—implementation of Maryland's HealthChoice program under which large numbers of Medicaid beneficiaries have been enrolled in managed care plans.

**Table 1-7: Total Maryland Health Expenditure (\$000s)  
by Delivery System and Source of Coverage: 1998–1999**

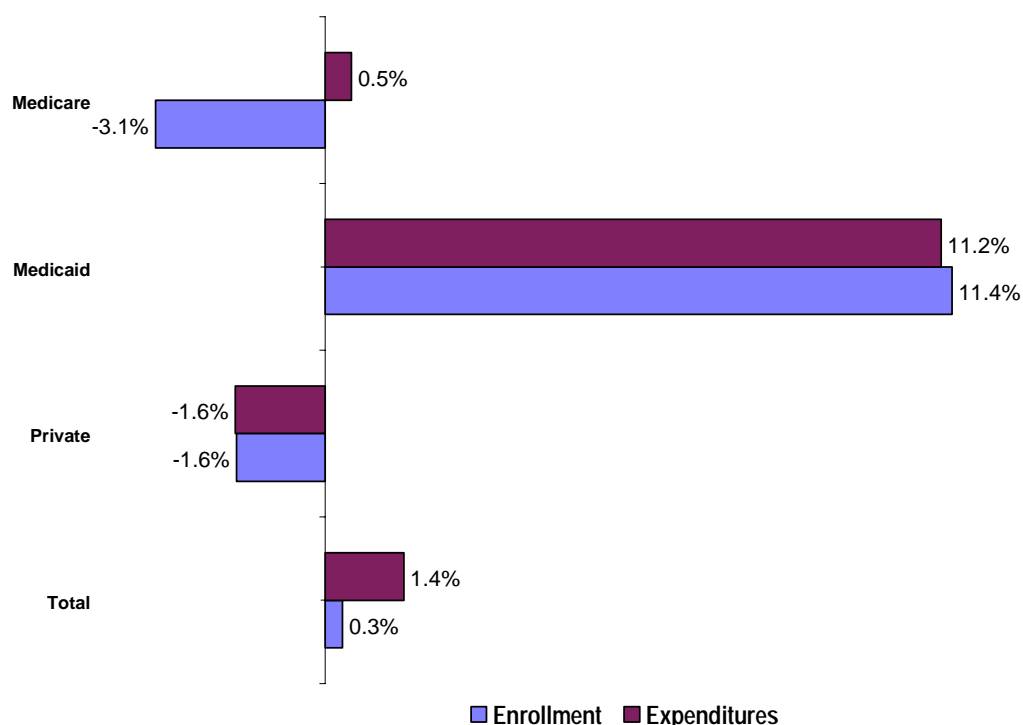
	HMO				NON-HMO THIRD PARTY			
	Medicare	Medicaid	Private	Total	Medicare	Medicaid	Private	Total
1998	\$479,773	\$903,652	\$2,731,987	\$4,115,412	\$3,264,524	\$1,885,926	\$4,955,830	\$10,106,280
1999	482,068	1,004,440	2,687,619	4,174,126	3,315,380	1,858,011	5,565,254	10,738,645
% Change 1998–99	0.5%	11.2%	-1.6%	1.4%	1.6%	-1.5%	12.3%	6.3%

The private sector is also characterized by slowing in the rate of growth of HMO expenditures. In fact, total estimated HMO-related spending fell 1.6 percent from 1998 to 1999, while expenditures under all types of non-HMO arrangements were up 12.3 percent. While it is

probably best to interpret the 1998–99 change in HMO spending as “approximately zero” for individuals with private coverage, these results contrast sharply with 1997–98 changes in which private HMO spending rose 6.3 percent and private non-HMO spending went up 7.8 percent.

Figure 1-6 compares growth in expenditures and enrollments for HMOs by type of payers. The figure shows that changes in HMO expenditures are highly correlated with changes in enrollment across market segments. Medicare+Choice expenditures fell by 3.1 percent even though Medicare HMO enrollment increased, albeit by 0.5 percent. Medicaid HealthChoice expenditures grew 11.2 percent from 1998 to 1999, while enrollment increased by 11.4 percent. In the private sector, HMO expenditures fell by 1.6 percent, exactly the same decline observed in enrollment for this time period.

**Figure 1-6: Percent Change in Enrollment and Expenditures for HMOs: 1998–1999**



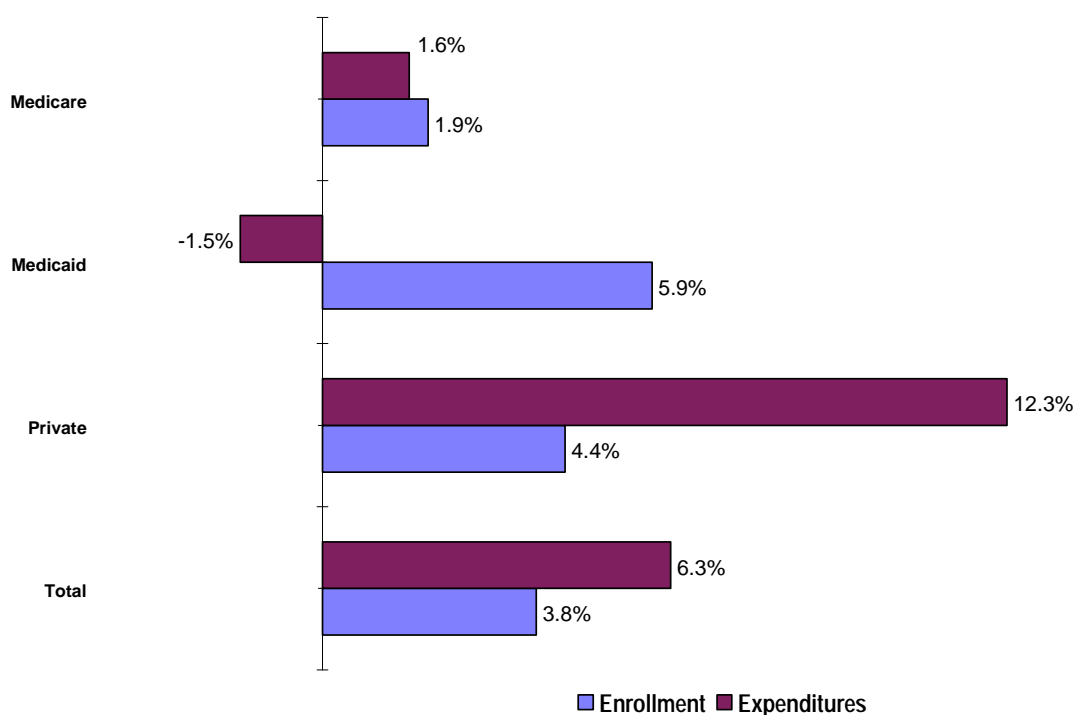
The lack of growth in private HMOs is somewhat surprising. One possible explanation is that Maryland residents are becoming less inclined to participate in tightly managed care programs of the type typically offered by HMOs. A second possibility is that private HMO enrollment has been affected by consolidation within the managed care industry. A third possible explanation is that the use of self-insurance is rising, leading firms to de-emphasize plan types that are commonly fully insured, such as HMOs.<sup>9</sup> A fourth explanation is that the distinction between HMOs and more traditional insurance arrangements has become increasingly blurred over time as private insurers have adopted many managed care operating principles and as HMOs have begun to offer greater choice and to relax constraints on the ability of enrollees to use out-of-network providers. However, if the absence of growth in private HMO activity is due to transient, one-time factors, the SHEA in 2000

<sup>9</sup> Christopher Hogan, Paul B. Ginsburg, Jon R. Gabel Health Affairs, “Tracking Health Care Costs: Inflation Is Back”, Health Affairs, Vol. 19, No. 6 (November/December 2000): 217-223

should reflect new growth in this sector. If it is due to permanent changes, such as the reasons just cited, the lack of growth may persist in 2001 and beyond.

The relationship between changes in non-HMO enrollment and expenditures is shown in Figure 1-7. Enrollment in original Medicare coverage increased 1.9 percent from 1998 to 1999, while expenditures rose 1.6 percent. In contrast, the number of Medicaid recipients outside of managed care arrangements rose 5.9 percent, even though their expenditures fell 1.5 percent. Private non-HMO enrollment increased 4.4 percent, while expenditures increased by 12.3 percent. On balance, one would expect expenditure changes to outpace enrollment because the population that remains in non-HMO arrangements tends to be more expensive to serve than the population that moves to HMOs. For example, the nursing home population and those who are dually eligible for Medicare and Medicaid are not currently eligible to enroll in Medicaid's HealthChoice program.

**Figure 1-7: Percent Change in Enrollment and Expenditures for Non-HMOs: 1998–1999**



The distribution of health care expenditures by source of funding is shown in Table 1-8. This table facilitates comparisons based on funding sources, but it also allows a comparison of expenditure distributions by HMOs and non-HMOs, since data on HMO expenditures by service category are available in 1999. Presumably, HMOs make more effort to substitute outpatient and preventive care for more expensive services, especially inpatient care. While HMO efforts to contain expenditures have certainly had spillover effects in the non-HMO market, most experts still believe that HMOs have made more of these shifts than non-HMO payers.

According to data in Table 1-8, private HMOs spend proportionately more than non-HMOs on physician services (37.8 percent and 31.4 percent, respectively) and a smaller share on prescription drugs (10.2 percent and 17.3 percent, respectively). Private HMOs also spend a higher proportion of

their dollars on outpatient hospital services than private, non-HMO plans, 11.0 versus 9.6 percent. Surprisingly, private insurance and HMOs have similar shares of expenditures on inpatient care (22.5 percent and 22.8 percent, respectively); this finding could reflect differences in the health status of the covered populations. To the extent that there are regional differences in market penetration by private managed care organizations, it could also reflect regional differences in local delivery systems.

**Table 1-8: Distribution of Maryland Health Expenditures  
by Source of Payment and Delivery System, 1999**

EXPENDITURE COMPONENTS	MEDICARE		MEDICAID		PRIVATE COVERAGE	
	Original Medicare	HMO	Traditional Medicaid	HMO	Insurers & Self-Funded	HMO
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services						
Inpatient	50.3	33.4	22.7	22.7	22.5	22.8
Outpatient	12.2	6.9	3.9	11.0	9.6	11.0
Physician Services	20.7	37.1	2.2	37.7	31.4	37.8
Other Professional Services	2.9	0.8	10.8	4.2	4.6	4.2
Prescription Drugs	0.0	4.2	9.6	9.5	17.3	10.2
Nursing Home Care	4.6	2.4	33.8	0.1	0.3	0.1
Home Health Care	3.5	1.5	13.8	1.2	1.1	1.2
Other Services	2.9	2.1	0.8	0.6	0.6	0.6
Admin. & Net Cost of Insurance	2.9	11.5	2.3	12.9	12.6	12.0

### ***OUT-OF-POCKET (OOP) EXPENDITURES***

OOP expenditures represent funds spent by residents for co-payments, co-insurance and deductibles, and for services that are not covered by a health plan. This category also contains expenditures by the uninsured. These types of expenditures occur for one of two reasons. On the one hand, they provide financial incentives that encourage enrollees not to use health care services in a wasteful or inappropriate manner. On the other hand, OOP expenditures occur because of gaps in insurance coverage or because individuals have no insurance whatsoever. For this reason, it is helpful to understand how much Maryland residents pay out of their own pockets for health care and how those payments have changed over time.<sup>10</sup>

**OOP expenditures in Maryland grew 4.0 percent between 1998 and 1999 (Table 1-9).** By contrast, national OOP expenditures increased an estimated 6.1 during the same period, somewhat higher than the SHEA estimate for Maryland. The increase in OOP expenditures in Maryland is due in large part to the 17.6 percent increase in prescription drug OOP spending. This increase is smaller than the 22.2 percent increase in total prescription drug spending reported in the SHEA, but it is still a substantial change and accounts for more than two-thirds (68.6 percent) of the entire statewide

<sup>10</sup> The 1999 SHEA makes no effort to distinguish OOP spending on uninsured services from OOP spending attributable to cost-sharing arrangements because of methodological difficulties in separating the two for individual sources of payment. However, in the past, the SHEA has suggested that cost-sharing accounts for about one-third of all OOP spending.

increase in OOP spending. This pattern suggests that payers absorbed more of the increase in prescription drugs expenditures, either by deepening coverage for individuals with prescription drug benefits or by extending prescription drug benefits to additional covered lives.

In addition to prescription drugs, two other services have growth rates in OOP spending that are close to or above the statewide average growth in OOP spending: physician services and nursing home care. The 4.5 percent increase in OOP spending for physician services is the second largest source of growth in OOP spending statewide, representing 27.5 percent of the statewide total. This growth appears to be due primarily to the 5.1 percent increase in aggregate physician spending. The 6.0 percent increase in OOP spending for nursing home care is the third largest source of growth in overall statewide OOP expenditures, representing 17.5 percent of the total. Like physician services, this growth appears to be driven in part by a general increase in spending on nursing home care, but the fact that the increase in OOP is larger than the overall rate of change suggests some type of reduction in coverage for this type of service. The cause of this reduction is not clear.

**Table 1-9: Changes in Maryland Out-of-Pocket Spending (\$000s), 1998–1999**

EXPENDITURE COMPONENTS	TOTAL Out-of Pocket (OOP)t		PERCENT DISTRIBUTION OF CHANGE IN OOP	PERCENT CHANGE IN OOP	PERCENT CHANGE IN TOTAL SPENDING
	1999	1998			
Total Health Expenditures	\$3,320,379	\$3,192,500	100.0%	4.0%	4.6%
Hospital Services					
Inpatient	106,526	103,639	2.3	2.8	2.4
Outpatient	132,644	129,049	2.8	2.8	1.5
Physician Services	810,299	775,137	27.5	4.5	5.1
Other Professional Services	919,311	921,653	-1.8	-0.3	-0.8
Prescription Drugs	586,559	498,827	68.6	17.6	22.2
Nursing Home Care	396,076	373,717	17.5	6.0	3.7
Home Health Care	168,690	175,127	-5.0	-3.7	-3.4
Other Services	200,275	215,351	-11.8	-7.0	-5.1

In general, a comparison of the last two columns in Table 1-9 suggests a high correlation between changes in total spending and changes in OOP spending. Where changes in OOP spending are smaller than changes in total spending (e.g., prescription drugs and physician services), it suggests expansions in insurance coverage have absorbed some of the increases for those services. When OOP spending grows more rapidly than total spending (e.g., outpatient hospital services and nursing home care), it implies reduced payer contributions.

**According to Table 1-10, the \$3.3 billion in OOP spending statewide in 1999 represents 17.4 percent of overall health care spending in Maryland for that year.** OOP spending also accounts for almost one-third, 32.2 percent, of all nursing home expenditures, 26.6 percent of all prescription drug expenditures, and almost half (46.4 percent) of services provided by health professionals other than physicians. These relatively high OOP expenditure rates represent the areas where health plans offer the least coverage to their enrollees. In contrast, inpatient hospital services



tend to be well covered by both public and private health plans. In fact, OOP payments for hospital inpatient care are very low, representing only 2.3 percent of total inpatient expenditures and 3.2 percent of total OOP spending. OOP expenditures for physician services (24.4 percent of all OOP spending) and other professional services (27.7 percent) together account for more than half of all OOP spending. The next largest categories are prescription drugs (17.7), which is outside the scope of original Medicare benefits, and nursing home care (11.9 percent), for which there is little private insurance coverage.

**Table 1-10: Patterns of Out-of-Pocket Spending, 1999**

EXPENDITURE COMPONENTS	Total OOP Spending	OOP As a Percent of All OOP Spending	OOP As a Percent of Total Spending
<b>Total Health Expenditures</b>	\$3,320,379	100.0%	17.4%
Hospital Services			
Inpatient	106,526	3.2	2.3
Outpatient	132,644	4.0	8.1
Physician Services	810,299	24.4	16.3
Other Professional Services	919,311	27.7	46.4
Prescription Drugs	586,559	17.7	26.6
Nursing Home Care	396,076	11.9	32.2
Home Health Care	168,690	5.1	25.5
Other Services	200,275	6.0	1.0

## **SUMMARY**

Overall growth in health care expenditures in Maryland during 1999 was 4.6 percent. This increase is slightly smaller than the 5.3 percent increase reported last year, but somewhat higher than the slow rate of growth experienced from 1993 to 1997. The 4.6 percent increase is also smaller than the 6.4 percent projected increase in national health care spending during the same period. About 15 percent of the state's 1999 expenditure increase was due to changes in Maryland's overall population, which grew about 0.7 percent. The majority of the remainder is attributable to inflation and greater resource utilization. Maryland's total health care spending in 1999 was \$19.1 billion, which represents an average of \$3,692 per resident.<sup>11</sup>

In relative terms, the private sector in Maryland expanded its role in financing health care expenditures in 1999. Spending growth in the private sector, including private coverage and OOP spending by consumers, was 6.4 percent overall. OOP spending, which includes direct payments by consumers for deductibles, co-insurance, and uninsured products and services, grew 4.0 percent while expenditures paid by private third parties (insurers, self-insured groups, and health plans) rose 7.4 percent. With these increases, the OOP share of total spending was 17.4 percent in 1999, and the share of statewide health care spending associated with private coverage was 43.2 percent. In contrast, the 1999 rate of growth for all government payers was 2.1 percent. Government spending on health care totaled \$7.5 billion, or 39.4 percent of total expenditures. Most of the government

<sup>11</sup> This statewide per capita figure includes administration and the net cost of insurance.



spending (88.6 percent) was funded by Medicare and Medicaid, which together accounted for 34.9 percent of all health care spending in the state.

The growth of the HMO system in Maryland slowed substantially in 1999. While Medicaid HMO enrollment continued to increase as a result of the HealthChoice program, enrollment in private HMO arrangements and in Medicare+Choice plans declined modestly. The reported declines in HMO enrollment (3.1 percent for Medicare and 1.6 for private payers) are somewhat misleading, because distinctions between indemnity-type arrangements and formal HMOs have blurred substantially in recent years. Most HMOs now offer point-of-service options, and some are experimenting with direct access to specialists. On the other hand, many traditional insurers now include some managed care provisions. Nevertheless, the information presented in the SHEA suggests that outside of the Medicaid program, there has been a general movement of both people and dollars away from HMO-type plans into more traditional insurance arrangements. This trend left the size of the HMO sector essentially unchanged from 1998 to 1999. In 1998, 40.8 percent of the Maryland population was enrolled in HMO plans; in 1999, the figure was 40.6 percent.



## 2. PER CAPITA HEALTH CARE EXPENDITURES IN MARYLAND

The level of health care expenditures in Maryland depends upon two basic factors. One is the distribution of the population across various types of payers. When more people have some type of coverage for their use of health services, it is reasonable to expect that expenditures will go up. At the same time, given a population distribution, total spending will depend upon the average level of spending per person by type of coverage. This chapter addresses the second of these issues—patterns of per capita spending in Maryland both in the aggregate and by source of payment.

**Per capita expenditures in 1999 for all health care services and administrative costs, averaged across all Maryland residents, was \$3,692, up 3.9 percent from the 1998 figure of \$3,554.** Per capita expenditures grew more slowly than total spending in Maryland because of the 0.7 percent growth in population. *Direct spending* per capita, which excludes administrative costs and the net cost of insurance, grew 3.8 percent from \$3,300 to \$3,424. The difference between these two growth rates was presented in Table 1-1, which shows that administrative costs increased 6.4 percent, or 1.8 percentage points more than overall statewide spending, from 1998 to 1999.<sup>1</sup>

### ***PER CAPITA DIRECT SPENDING FOR DIFFERENT POPULATION GROUPS***

Table 2-1 shows that statewide per capita figures conceal important payer-specific differences in average per capita spending.<sup>2</sup> **The average direct per capita spending for people with private coverage in 1999 is \$2,366, while Medicaid enrollees have a direct per capita figure of \$5,617 and the average for Medicare is \$6,373 per person.** The variation in the level of per capita expenditures by payer source reflects the different health care needs of enrolled populations and distinguishing aspects of the benefit packages of Medicare, Medicaid, and private health plans. Medicare covers a population that is elderly or disabled and, for this reason, has per capita

<sup>1</sup>For some purposes, direct spending is a better measure of the health care services provided to Maryland residents, because it is not confounded by such issues as who pays for utilization review, periodic changes in accounting standards, or the costs of marketing, sales, and claims processing. However, direct spending does not provide a complete answer to the question “How much do Maryland residents pay for health care?” precisely because it does not take into account such administrative costs.

<sup>2</sup>One problem in developing per capita estimates from the SHEA is the fact that some people have more than one type of coverage. For example, approximately 55,181 Maryland residents in federal FY1999 were covered by both Medicare and Medicaid. Another 46,780 residents had private insurance and Medicaid coverage. In constructing the payer-specific per capita estimates reported in this chapter, no effort was made to correct “double-counting”; however, every effort was made to ensure that the expenditures in the numerator of the per capita ratio matched the individuals included in the denominator. Medicare expenditures include all Medicare program payments made on behalf of Maryland residents plus co-insurance and deductibles due for services, regardless of whether they are paid by supplemental private insurance (“MediGap”), Medicaid, or beneficiaries themselves. The creation of a Medicaid per capita figure is more problematic because Medicaid actually involves several different programs with varying eligibility criteria and benefits. It is not possible to portray this multidimensional public program accurately with a single number. Nevertheless, for the purpose of this discussion, Medicaid per capita expenditures include all program payments except for payments made under the Maryland Pharmacy Assistance Program. Medicaid beneficiaries in the denominator exclude participants in the Maryland Pharmacy Assistance Program, the Family Planning Program, and the Maryland Kids Count Program. Private insurance per capitas are defined for all insured individuals who do not have Medicare, Medicaid, or CHAMPUS coverage. Privately insured expenditures include payments by insurers and self-funded plans, payments made by HMOs, and co-insurance and deductibles paid by enrollees. Privately insured expenditures do not include payments made by Medigap insurers for Medicare co-insurance and deductibles.

expenditures that are almost three times those of the privately insured. Medicaid targets low-income residents and individuals with a substantial need for financial assistance in covering health care costs. The relatively high level of Medicaid spending is attributable to beneficiary health status, the comprehensive benefit package provided by Medicaid, and the expense involved in offering a nursing home benefit. In contrast, individuals with private coverage are generally not elderly. Because most private coverage is employment related, this population also tends to be in relatively good health, since good health is generally necessary to hold a job.

**Table 2-1: Maryland Average Direct Per Capita Expenditures for Covered Services by Primary Source of Insurance: 1998–1999**

	MEDICARE	MEDICAID	PRIVATE COVERAGE	TOTAL
1998	\$6,365	\$6,087	\$2,218	\$3,198
1999	6,373	5,617	2,366	3,284
% Change 1998–99	0.1%	-7.7%	6.7%	2.7%

**Direct per capita expenditures for the insured population increased 2.7 percent from 1998 to 1999, excluding administrative expenses and the net cost of insurance.** However, Table 2-1 shows considerable variation in the rate of increase by payer. The privately insured had the largest increase, 6.7 percent, from 1998 to 1999. Medicaid actually experienced a reduction of 7.7 percent from 1998 to 1999, following a 4.9 percent rise from 1997 to 1998. Some of this reduction is attributable to the increasing enrollment of children due to the Children's Health Insurance Program (CHIP). This population would have lower health care utilization than the traditional Medicaid population. Administrative adjustments to the HealthChoice capitation rate may have also been a factor.<sup>3</sup> Average per capita spending for Medicare beneficiaries rose only 0.1 percent.

Although HCFA does not report per capita expenditures for Medicare and Medicaid because of limitations with the measure for these populations,<sup>4</sup> a rough estimate indicates about a 5 percent increase nationally,<sup>5</sup> which contrasts with the estimated 0.1 percent increase in Maryland. In part, this difference is attributable to slower growth generally in Maryland expenditures compared to national spending. However, because Medicare beneficiaries are especially high users of hospital services, this difference also reflects relatively slow growth in Maryland hospital expenditures and different rates of growth in the proportion of beneficiaries enrolled in Medicare+Choice (HMO) arrangements. While each of these factors undoubtedly makes a contribution, it is difficult to determine the precise cause of the observed differences in growth rates for Medicare spending.

<sup>3</sup> Technical problems with risk adjustment algorithms in 1998 lead to the creation of capitation rates that were too high. Rather than recovering funds, DHMH elected to adjust 1999 capitated rates to reflect the 1998 over-payment.

<sup>4</sup> Health Care Financing Administration. Personal Health Care Expenditures Aggregate and Per Capita Amounts and Percent Distribution, by Source of Funds: Selected Calendar Years 1960–98. <http://www.hcfa.gov/stats/NHE-oact/tables/t4.htm> (December 1, 2000).

<sup>5</sup> Health Care Financing Administration. Personal Health Care Expenditures Aggregate and Per Capita Amounts and Percent Distribution, by Source of Funds: Selected Calendar Years 1960–98. <http://www.hcfa.gov/stats/NHE-oact/tables/t4.htm> (December 1, 2000) and Medicare Enrollment Trends 1966–1999. <http://www.hcfa.gov/stats/enrltrnd.htm> (December 1, 2000).

Overall per capita expenditures for people with private coverage increased by 6.7 percent, identical to the 6.7 percent increase that occurred from 1997 to 1998. Per capita spending for this group should be of special interest to employers and organized labor, because it approximates expenditures for covered services per person enrolled in an employment-related health benefit plan.<sup>6</sup> The increase in per capita expenditures for people with private coverage can be split into two components: third-party payments (made by insurers, HMOs, etc.) and out-of-pocket (OOP) payments made for co-payments and deductibles. Third-party payments per capita increased from \$1,906 in 1998 to \$2,035 in 1999, an increase of 6.8 percent (Table 2-2). OOP payments increased an estimated \$18 per person, or 5.8 percent, over the same time period.

**Table 2-2: Maryland Average Per Capita Expenditures for Covered Services  
Among People with Private Coverage (Insurers, Self-Funded and HMO): 1998–1999**

	THIRD-PARTY PAYMENT	OOP CO-PAYS/ DEDUCTIBLES	TOTAL PAYMENT
1998	\$1,906	\$312	\$2,218
1999	2,035	330	2,366
% Change 1998–99	6.8%	5.8%	6.7%

<sup>6</sup> The privately insured figure does not include expenditures for Medicare supplemental insurance.



### 3. REGIONAL ANALYSIS OF MARYLAND'S HEALTH CARE MARKET PLACE

The health care market place in Maryland is characterized by diversity. There are substantial regional variations across the state in terms of demographics, economic circumstances, health status, insurance coverage, and the availability of health care resources. This diversity inevitably affects the health care services that are required to treat individuals in different parts of the state, their ability to find providers to deliver those services, and the prices that they must pay for such care.

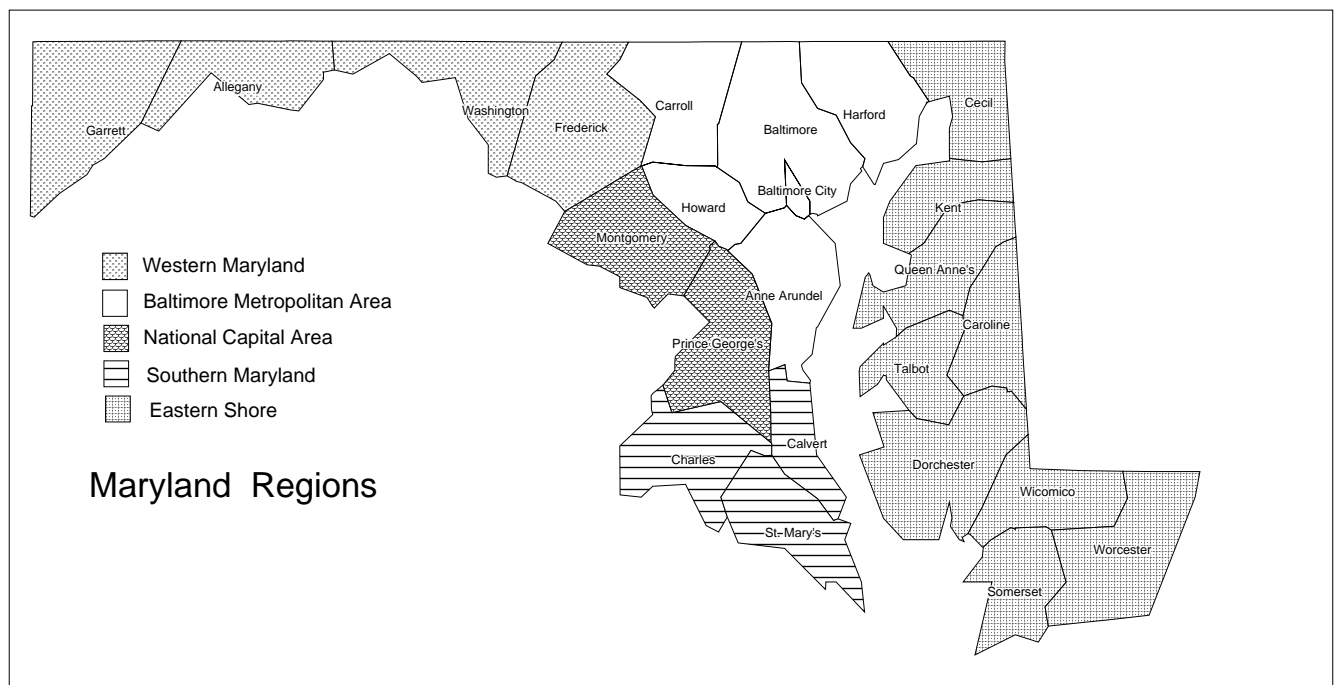
The purpose of this chapter is to highlight regional differences in health care spending across the state, focusing on two basic issues: the extent to which expenditures vary across regions within the state and how the distribution of expenditures by source of payment and by type of service varies by region.

This chapter builds on ideas presented in Chapters 1 and 2, which provide detailed discussions of the distribution of expenditures at the state level. Some of that discussion is mirrored here at the regional level. The previous chapters also discuss the data sources and allocation methods used in generating the tables and provide some caveats that should be read to avoid over-interpreting the data.

#### ***DEFINING THE REGIONS WITHIN MARYLAND***

Geographic variation within Maryland in the pattern and level of health care spending is best understood by segmenting the state into regions that share a common health care infrastructure, as well as similar demographics, economic indicators, medical care costs, and utilization patterns. With this goal in mind, Maryland was divided into five regions of analysis, as shown in Figure 3-1. This regional classification conforms to that used by the Maryland Vital Statistics Administration.

**Figure 3-1: Maryland Regions**



## ***REGIONAL VARIATION IN FACTORS THAT INFLUENCE HEALTH CARE UTILIZATION***

The volume of spending for health services in a region results from choices made in that region's health care market place. Demand, supply, and service prices — which lie behind the observed choices — vary from region to region, and the result is regional differences in what is purchased and how much is spent.<sup>1</sup> **This section of the chapter describes many of the factors that influence health care service demand and supply: population demographics, health status and life style, health care coverage and economic factors, and resource availability.**

**The comparative information in Table 3-1 illustrates regional variation in factors that drive health care utilization.** Age distributions and racial composition, which tend to shape health care needs and preferences, differ significantly by region. For instance, the proportion of minorities ranges from 7.4 percent in Western Maryland to 44.4 percent in the National Capital Area. The Eastern Shore is home to the state's oldest population, with 14.6 percent of the population age 65 or older. Southern Maryland, in contrast, is home to the youngest population: only 8.5 percent of its population is elderly while nearly 30 percent is under the age of 18. Regional diversity also exists in the availability of treatment resources, which influences what services are utilized. The supply of Maryland-based hospital beds and physicians ranges from 133 beds and 104 physicians per 100,000 population in Southern Maryland to 326 beds and 356 physicians per 100,000 residents in the Baltimore Metropolitan Area. The National Capital Area has almost as many physicians as Baltimore, 355 physicians per 100,000 population, but at 172 beds per 100,000 population, it has almost half as many beds. However, hospital beds in the District of Columbia are used by residents of the National Capital Area (and Southern Maryland). Such border crossing expands the resources available to residents near the state's borders.

Economic well-being and health insurance coverage, both of which are positively correlated with greater health care utilization, are associated with considerable — and complex — regional variation. The National Capital Area has the highest per capita income in the state, \$35,084 in 1999, and the lowest unemployment in 1999 at 2.6 percent. The lowest per capita income and highest unemployment are found on the Eastern Shore with per capita income of \$23,720 and a 5.0 percent unemployment rate. The regional uninsured rates range from 8.5 to 16.0 percent: the Eastern Shore has the highest rate but Southern Maryland, not the National Capital Area, has the lowest rate.

Two other aspects of insurance coverage — the type of payer and the delivery system — are also important factors in health care utilization and spending. Insurers differ in their coverage packages (influencing what services are used) and in the populations they serve. As a result, the proportion of the population served by each of the major payer categories has implications for regional health care expenditures. Enrollment in public insurance programs is positively related to higher per capita expenditures because of greater health care needs, especially in Medicare, and the broad benefit package in Medicaid.<sup>2</sup> Medicare enrollment ranges from 16.4 percent of the residents

<sup>1</sup> With regard to prices for most services in Maryland (excluding hospital services, which are set by the state's regulatory system), the state's private payers tend to negotiate service prices and the public payers set service prices. Medicaid has one price schedule for the state, but Medicare pays slightly lower prices in the state's rural regions. Private payers can negotiate lower prices in areas where they have significant numbers of enrollees and where there are many competing health care providers, making it difficult to identify and characterize regional price trends in the private market.

<sup>2</sup> Full Medicaid benefits require no co-payments and include coverage for prescription drugs, extended nursing home care, and a variety of mental health services not covered by other payers.



Table 3-1: Health-Related Data for Maryland Regions

CHARACTERISTICS	REF. NO.*	WESTERN MD	BALTIMORE METRO AREA	NATIONAL CAPITAL AREA	SOUTHERN MD	EASTERN SHORE	MARYLAND TOTAL
<b>DEMOGRAPHICS</b>							
Total population, 1999	1	419,211	2,450,566	1,633,955	283,452	384,450	5,171,634
Population % growth, 1998–1999		1.1%	0.3%	0.9%	2.1%	1.3%	0.7%
Population distribution, 1999:	1						
Under age 18 population (as % of total)		25.5%	25.1%	24.9%	29.9%	25.1%	25.3%
18–44 population (as % of total)		39.4%	40.7%	43.9%	41.3%	37.5%	41.4%
45–64 population (as % of total)		22.2%	21.9%	21.4%	20.3%	22.9%	21.8%
65 & older population (as % of total)		12.9%	12.3%	9.9%	8.5%	14.6%	11.5%
Minority population (as % of total)		7.4%	31.1%	44.4%	23.6%	24.1%	32.5%
<b>HEALTH STATUS</b>							
Total births, 1999	2	5,324	33,522	24,269	3,934	4,773	71,822
Low birth weight babies (% of births)		6.9%	9.8%	8.9%	6.9%	9.3%	9.1%
Late or no prenatal care (% of births)		12.3%	12.5%	12.1%	14.1%	13.5%	12.5%
Infant mortality rate per 1,000 live births		5.3	8.8	8.5	6.1	8.8	8.3
AIDS deaths per 100,000 pop., 1998	3	1	14	7	3	4	10
Heart disease deaths per 100,000 pop., 1998	3	298	257	170	164	305	231
Malignant neoplasm deaths per 100,000 pop., 1998	3	206	226	153	156	236	198
Cerebrovascular disease (stroke) deaths per 100,000 pop., 1998	3	69	57	40	30	60	51
Chronic pulmonary disease deaths per 100,000 pop., 1998	3	51	36	20	35	53	33
Pneumonia & influenza deaths per 100,000 pop., 1998	3	38	35	27	20	38	32
Diabetes deaths per 100,000 pop., 1998	3	32	32	21	22	35	28
Accidents and adverse effects deaths per 100,000 pop., 1998	3	30	27	20	31	43	26
Septicemia deaths per 100,000 pop., 1998	3	11	18	12	8	15	14
Homicide deaths per 100,000 pop., 1998	3	2	15	11	4	6	11
<b>HEALTH CARE COVERAGE &amp; ECONOMIC INDICATORS</b>							
Medicare enrollment (% of pop.), 1999	4	14.3%	13.8%	10.1%	9.0%	16.4%	12.6%
Medicaid enrollment (% of pop.), 1999	5	6.4%	8.6%	5.4%	5.5%	8.0%	7.2%
Personal income per capita, 1998	6	\$25,238	\$29,479	\$35,084	\$26,438	\$23,720	\$30,311
Per capita income, (1997–98) % change		10.7%	6.1%	4.2%	9.7%	3.5%	5.7%
Unemployment rate (% of civilian labor force), 1999	7	3.7%	4.0%	2.6%	2.7%	5.0%	3.5%
Unemployment rate (% of civilian labor force), 1998–99 absolute change		-1.1%	-1.2%	-0.7%	-0.8%	-1.6%	-1.1%
Percent uninsured, 1999	8	14.8%	12.3%	11.2%	8.5%	16.0%	12.2%
Percent uninsured, 1998–99 absolute change		-0.1%	-0.8%	-1.8%	-2.1%	-0.8%	-1.2%
Percent with private coverage (excluding Medigap), 1999	8	61.7%	62.6%	70.6%	74.2%	56.9%	65.3%
Percent with private coverage (excluding Medigap), 1998–99 absolute change		-0.6%	0.1%	1.0%	1.6%	-0.3%	0.4%
<b>RESOURCES AVAILABLE</b>							
Nursing home beds available per 100,000 pop., 1998	9	877	630	461	462	797	600
Licensed acute care hospital beds per 100,000 pop., 1998	9	253	326	172	133	232	254
Total nonfederal patient care physicians per 100,000 pop., 1997	10	160	356	355	104	155	312

\*References listed on page 33.

on the Eastern Shore to just 9.0 percent in Southern Maryland; Medicaid enrollment is highest in the Baltimore Metropolitan Area at 8.6 percent of residents, and lowest in the National Capital Area at 5.4 percent. Southern Maryland has the highest percent of the population with private coverage (74.2 percent), followed by the National Capital Area at 70.6 percent. Variation in the HMO market share of a payer's enrollees also affects spending, since HMOs are generally associated with lower per capita expenditures than fee-for-service for a given population.

Regional variations in health care expenditures can be attributed not only to the levels of these factors observed in each of Maryland's regions but also to how these factors have changed over time. According to the information presented in Table 3-1, Southern Maryland has one of the most dynamic populations in the state. It is the most rapidly growing, with a population that increased 2.1 percent from 1998 to 1999. At the same time, the percent of the population that has no health insurance coverage fell 2.1 percentage points from 10.6 percent to 8.5 percent, largely because the portion of the population with private coverage increased from 72.6 percent to 74.2 percent during the same period. Southern Maryland also experienced a 9.7 percent increase in per capita income in 1999, which is much larger than any other region except for Western Maryland with a 10.7 percent increase. Despite this economic growth, the availability of health care resources appears to lag in this region. Southern Maryland has the fewest hospital beds and physicians per 100,000 population (133 beds and 104 physicians) of any region. Limited resources for delivering care in the face of pressure to increase the demand for health care services may cause higher prices and contribute to increases in per capita spending. However, in evaluating regional differences in spending, it is important to recognize that regions are not isolated from each other. For example, because many residents of Southern Maryland travel to the National Capital Area or the District of Columbia to work, it is likely that they are receiving health care in these locations as well.

## ***REGIONAL HEALTH CARE EXPENDITURES***

Table 3-2 summarizes the distribution of health care expenditures by region for 1999. As in previous years, the Baltimore Metropolitan Area accounts for over half (51.2 percent) of all spending in the state of Maryland, up slightly from 50.9 percent in 1998. The National Capital Area ranks second in terms of total Maryland spending in 1999 (29.0 percent), although this share has declined over time. Last year, the National Capital Area represented 29.3 percent of statewide spending. The share of statewide spending in other regions in 1999 is essentially the same as in 1998. Southern Maryland accounts for 5.3 percent of statewide spending; Western Maryland, 7.6 percent; and the Eastern Shore, 6.8 percent.

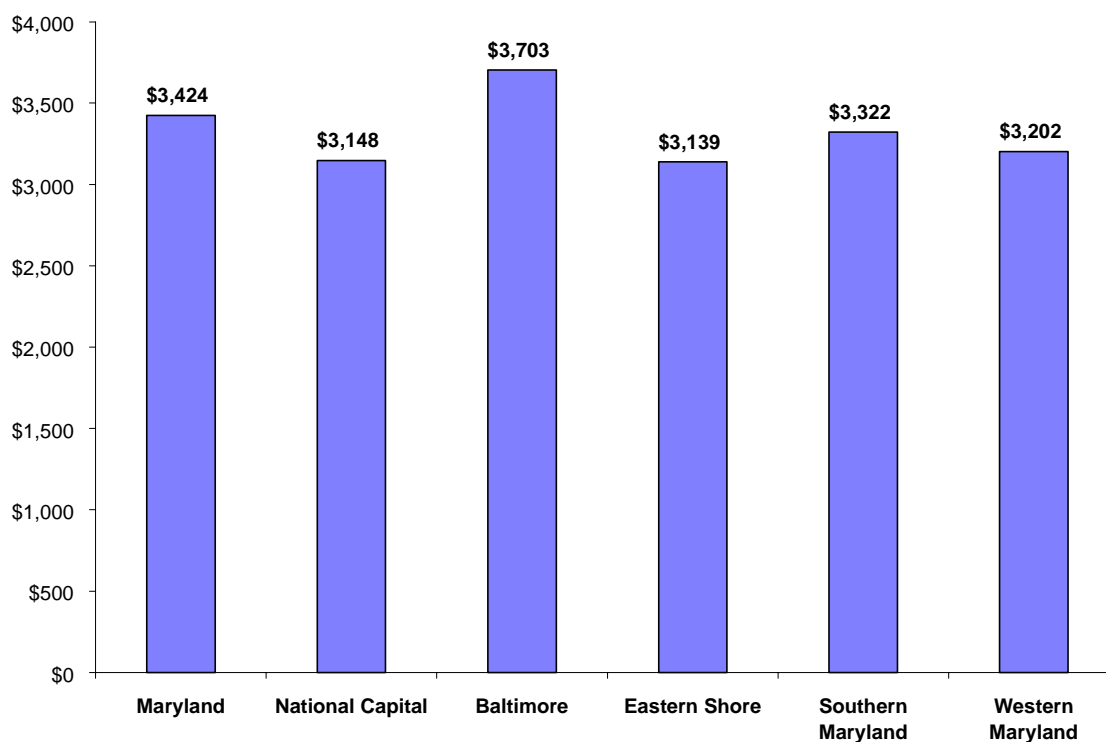
**Table 3-2: Regional Distribution of Maryland's Population  
and Direct Health Care Expenditures (\$000s), 1999**

REGION	% OF POPULATION	EXPENDITURES	% OF EXPENDITURES
<b>Maryland Total</b>	<b>100.0%</b>	<b>\$17,708,923</b>	<b>100.0%</b>
National Capital	31.6	5,143,113	29.0
Baltimore	47.4	9,075,137	51.2
Eastern Shore	7.4	1,206,728	6.8
Southern MD	5.5	941,624	5.3
Western MD	8.1	1,342,321	7.6

NOTE: Regional expenditure analyses do not include expenses for administration and net cost of insurance.

If per capita expenditures were the same for every region, then a region's percentage of the state population would exactly predict its share of state health care spending. **However, significant differences exist between the proportion of the population living in a region and the proportion of state health care expenditures spent on that population, according to Table 3-2.** In relative terms, the greatest difference between a region's shares of population and expenditures occurs on the Eastern Shore, where the region's share of expenditures (6.8 percent) is 8.1 percent *smaller* than its 7.4 percent share of the state's population. Other regions where spending is less than the share of statewide population include the National Capital Area, with 29.0 percent of spending and 31.6 percent of the population, and Western Maryland, which has 7.6 percent of spending compared to 8.1 percent of the population. Southern Maryland has approximately the same percent of statewide spending and population, which means that the Baltimore Metropolitan Area is the only region with a share of statewide spending that is larger than its share of the state's population. Baltimore's share of expenditures, 51.2 percent, *exceeds* its 47.4 percent share of population by about 8 percent.

Figure 3-2: Per Capita Direct Health Care Expenditures by Region, 1999



**These differences between the regional population and spending distributions are reflected in regional variations in per capita spending.** As shown in Figure 3-2, Baltimore has the highest average per capita expenditures in the state, \$3,703, which is more than 8 percent above the statewide average of \$3,424.<sup>3</sup> All other regions are below the statewide average. Southern Maryland, at \$3,322, is closest to the average with a difference of less than 3 percent. The Eastern Shore has the lowest average per capita expenditures, \$3,139, which is more than 8 percent below the state average

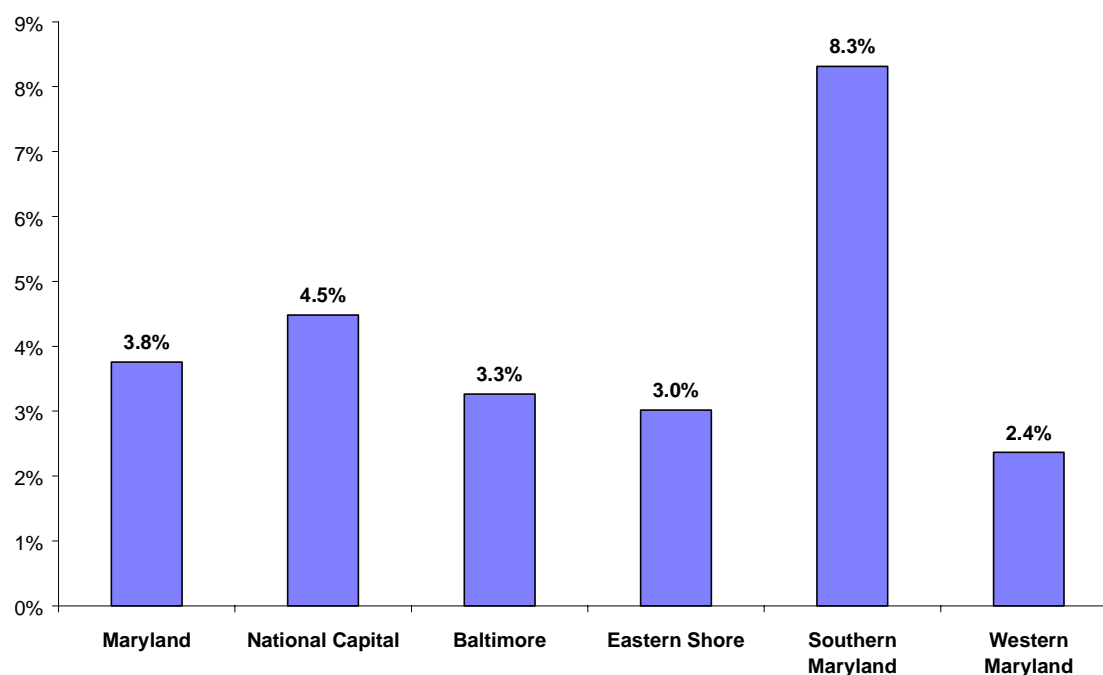
<sup>3</sup> Average regional per capita costs do not include administrative expenditures or the net cost of insurance. They measure spending for all residents in the region, regardless of insurance coverage. For that reason, they are not comparable to the per capita spending estimates reported in the previous section, which dealt specifically with the insured population.

and over 15 percent smaller than Baltimore. Per capita expenditures in the National Capital Area (\$3,148) and Western Maryland (\$3,202) are 8 and 6 percent, respectively, below the statewide average.

There are a number of factors that appear to contribute to the Baltimore area's relatively high expenditure rate. One is health status. Baltimore is generally among the worst regions in terms of the various health status measures reported in Table 3-1; incidence rates for the conditions shown in this table generally exceed the statewide average by significant amounts. Baltimore also has relatively high portions of its population enrolled in public programs. However, these factors alone do not explain the high spending levels in Baltimore, since both Western Maryland and the Eastern Shore have similar health status measures and enrollment levels in public programs. What sets Baltimore apart, and what appears to account for its spending levels, is the extent of acute health care resources that are available in that region, measured in terms of either physicians or hospital beds per capita.

Figure 3-3 illustrates how the regional per capita figures changed from 1998 to 1999. While the statewide increases in expenditures per capita averaged 3.8 percent, two regions had significantly higher rates of increase. Per capita spending in the National Capital Area increased 4.5 percent in 1999, while per capita spending in Southern Maryland went up 8.3 percent. The increase in the National Capital Area is smaller in absolute terms, but it is more important in pushing up the statewide average. Increases in the National Capital Area are responsible for 35 percent of the overall statewide increase in per capita spending, while increases in Southern Maryland account for another 12 percent of this increase.

**Figure 3-3: Growth in Per Capita Direct Health Care Expenditures by Region, 1998–1999**



What factors might explain the unusual increase in per capita spending in Southern Maryland? Rising per capita income probably played a role in this growth, but another possible explanation is illustrated in Figure 3-4, which reports changes in managed care market penetration from 1998 to

1999. According to these data, Southern Maryland is the only region to experience substantial declines in market share for both Medicare+Choice and private HMOs. Medicare+Choice enrollment declined 28.1 percent in 1999 while participation in private HMOs declined 24.5 percent. To the extent that managed care had been successful in constraining expenditure growth and encouraging enrollees to use more efficient types of providers, the type of market shift shown in Figure 3-4 could well explain at least a portion of the growth in health care spending in Southern Maryland. Other factors include a nearly 10 percent increase in per capita income and an 18 percent decrease in the number of uninsured or a 20 percent reduction in the proportion of residents without insurance.

**Figure 3-4: Change in Medicare+Choice, Medicaid HealthChoice, and Private HMO Market Penetration, by Maryland Region, 1998 – 1999**

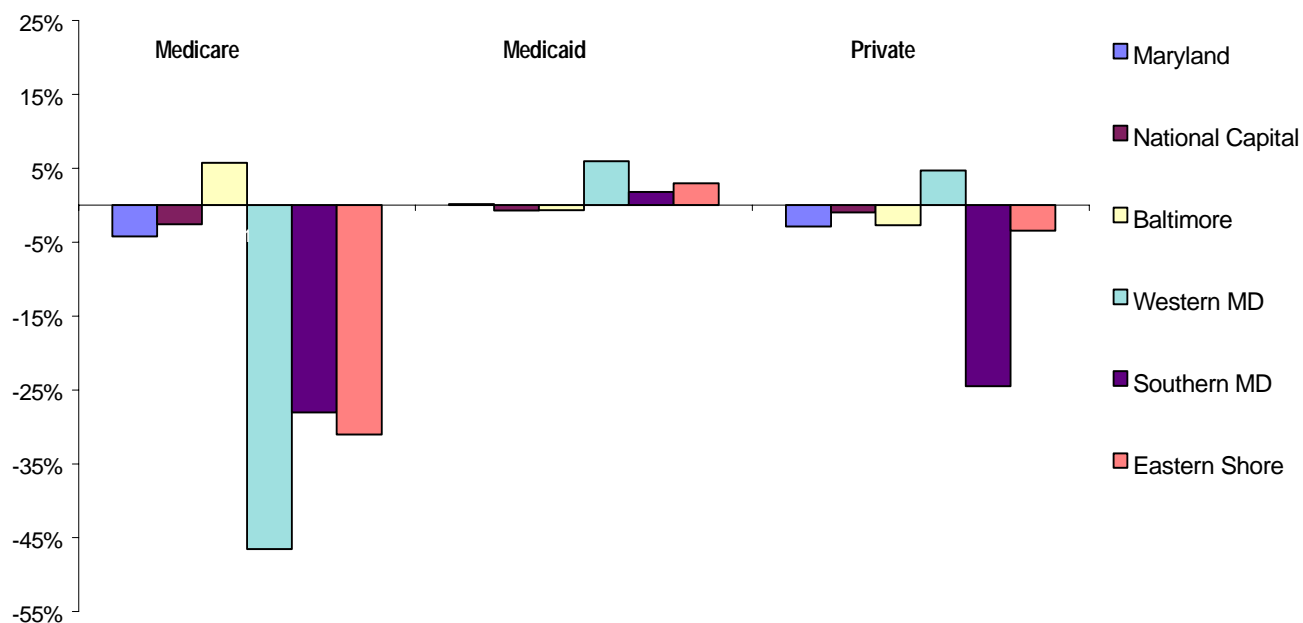


Table 3-3 illustrates regional variations in the mix and cost of services by summarizing the distribution of direct expenditures across the eight different service categories for each of the five regions within Maryland. The distribution of spending across services categories does not vary as much as one might expect from one region to another, but there are some notable differences. For example, inpatient hospital expenditures are highest in Southern Maryland (27.0 percent of all spending by residents in the regions) and Baltimore (26.7 percent). They are relatively low in the National Capital Area (25.4 percent), in Western Maryland (25.4 percent), and on the Eastern Shore (25.0 percent). In contrast, spending on outpatient hospital services as a percent of the total is highest on the Eastern Shore (9.7 percent) and lowest in Southern Maryland (8.2 percent). The National Capital Area spends proportionately more than other regions on physician services, which accounts for 30.1 percent of all spending in that region. The National Capital Area is followed closely by Southern Maryland, with 29.7 percent, even though Southern Maryland has relatively few patient care physicians, reflecting use of physicians outside the geographic region. Spending on physician services accounts for 25.7 percent of all spending on the Eastern Shore and 25.9 percent of spending in Western Maryland. Both of these regions have relatively low physician-population ratios, low per capita incomes, reductions in health care coverage by private payers, and relatively small declines in unemployment in 1999.

**Table 3-3: Distribution of Direct Health Care Expenditures (\$000s)  
by Region and Type of Service, 1999**

EXPENDITURE COMPONENTS	NATIONAL CAPITAL		BALTIMORE		EASTERN SHORE		SOUTHERN MARYLAND		WESTERN MARYLAND	
<b>Total Health Expenditures</b>	<b>\$5,143,113</b>	<b>100.0%</b>	<b>\$9,075,137</b>	<b>100.0%</b>	<b>\$1,206,728</b>	<b>100.0%</b>	<b>\$941,624</b>	<b>100.0%</b>	<b>\$1,342,321</b>	<b>100.0%</b>
Hospital Services										
Inpatient	1,306,570	25.4	2,427,063	26.7	302,000	25.0	253,835	27.0	340,442	25.4
Outpatient	478,494	9.3	832,515	9.2	117,215	9.7	76,865	8.2	126,161	9.4
Physician Services	1,547,471	30.1	2,488,956	27.4	310,499	25.7	279,641	29.7	347,679	25.9
Other Professional Services	563,562	11.0	1,038,217	11.4	137,648	11.4	94,448	10.0	145,598	10.8
Prescription Drugs	685,403	13.3	1,082,398	11.9	131,836	10.9	140,057	14.9	161,493	12.0
Nursing Home Care	283,023	5.5	638,856	7.0	126,682	10.5	50,711	5.4	131,515	9.8
Home Health Care	176,175	3.4	351,424	3.9	46,508	3.9	29,515	3.1	57,318	4.3
Other Services	102,414	2.0	215,708	2.4	34,342	2.8	16,550	1.8	32,114	2.4

NOTE: Regional expenditure estimates do not include expenses for administration and the net cost of insurance.

## SUMMARY

Significant differences exist between each region's shares of the state population and its share of state health care expenditures. The gap between population and expenditure shares is closely related to regional differences in per capita expenditures. The highest per capita spending in 1999 occurs in Baltimore, which is more than 8 percent above the statewide average. The lowest per capita spending level — more than 8 percent below the statewide average — occurs in the Eastern Shore. Among all regions, Southern Maryland has a per capita expenditure rate closest to the 1999 statewide average and therefore exhibits the smallest relative difference between its population and expenditure shares. However, the situation in Southern Maryland appears to be the most fluid because of rapid population growth, changes in managed care market penetration, and increases in per capita income.

There is no simple explanation for why spending varies from one region of the state to another. Health care spending is determined by a complex set of factors that includes population demographics, health status, insurance coverage, economic circumstances, and the incidence of specific medical conditions, as well as the availability of resources to provide medical care to local populations. Clearly, such factors vary considerably from one part of the state to another, and these variations necessarily lead to regional differences in health care utilization and expenditures. A detailed explanation of why these variations exist is well outside the scope of the SHEA project. However, identifying, measuring, and monitoring these differences is the first step in developing an appropriate level of understanding—and in formulating effective state policy to improve and sustain the health of Maryland residents.



**REFERENCES FOR TABLE 3-1**

1. U.S. Department of Commerce, Census Bureau. "Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 (includes revised April 1, 1990 census population counts)." Web site: <http://www.census.gov/population/estimates/state/st-99-3.txt>. Accurate as of July 15, 1999. Regional estimates derived from Maryland Office of Planning, "1999 Population for Maryland Jurisdictions," March, 2000. Web site: <http://www.op.state.md.us/MSDC>.
2. Maryland Department of Health and Mental Hygiene, Division of Health Statistics. *Maryland Vital Statistics 1999 Preliminary Report*. Baltimore, Maryland, 2000. NOTE: Rates reported in Table 3-1 are not age-adjusted.
3. Maryland Department of Health and Mental Hygiene, Division of Health Statistics. *Maryland Vital Statistics Annual Report 1998*. Baltimore, Maryland, 1999.
4. Medicare beneficiaries with Part A or Part B coverage. Data from Health Care Financing Administration. "Medicare County Enrollment as of July 1, 1999." Web site: <http://www.hcfa.gov/STATS/ENROLL/070199/MARYLAND.HTM>. Information accurate as of July 1999.
5. Medicaid enrollment counts for those with full Medicaid coverage who are not also covered by either Medicare or private insurance. Data sources: (1) Medicaid enrollment counts (excluding groups with limited coverage and those dually enrolled in Medicare) generated by the Center for Health Program Development and Management, University of Maryland-Baltimore County at the request of the Maryland Department of Health and Mental Hygiene, Office of Planning, Development, and Finance; and (2) Estimated proportion of Medicaid enrollees with private insurance coverage from the Maryland Department of Health and Mental Hygiene, Division of Medical Assistance Recoveries.
6. **National and state:** U.S. Department of Commerce, Economic and Statistics Administration, Bureau of Economic Analysis. Regional Accounts Data, State Personal Income. Web site: <http://www.bea.doc.gov/bea/regional/spi/pcpi.htm>. **Counties:** Maryland Office of Planning, Research and State Data Center (Bureau of Economic Analysis data).
7. **National:** U.S. Department of Labor, Bureau of Labor Statistics. Labor Force Statistics from the Current Population Survey. "Unemployment Rate—Civilian Labor Force, Age 16 Years and Older, Seasonally Adjusted." Web site <http://www.bls.gov/news.release/cps/home.htm>. **State:** Maryland Department of Labor, Licensing, and Regulation. "Maryland Civilian Labor Force, Employment and Unemployment by Place of Residence—1978–1999." Web site <http://www.dllr.state.md.us/lmi/78.htm>. **Counties:** Maryland Department of Labor, Licensing, and Regulation. "Regional Data—1990 to 1999 Annual Averages Civilian Labor Force, Employment and Unemployment by Place of Residence." Web site: <http://www.dllr.state.md.us/lmi/9097avg.htm>.
8. Uninsured regional rates are MHCC calculations based on (1) average uninsured rate for Maryland from the *Current Population Survey* (U.S. Department of Commerce, Census Bureau), 1996, 1997, 1999 (excluding 1998 due to problems with Maryland data); (2) population estimates from citation no. 1; and (3) estimated uninsured rate for each region's non-elderly adults from the *Behavioral Risk Factor Surveillance Survey* (Centers for Disease Control & Prevention), 1997–1999. Estimates of the proportion of regional residents with private insurance as their primary coverage is the residual after removing the proportions covered by Medicare (citation no. 4) or Medicaid only (citation no. 5), and those lacking coverage.
9. Maryland Department of Health and Mental Hygiene, Office of Health Care Quality. Monthly Bed Recap, February, 1999. Baltimore, Maryland.
10. MHCC calculations based on U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, *Area Resource File: February 1999 Release*. Data represents nonfederal physicians in patient care per 100,000 population based on (1) American Medical Association Physician Master files, (2) American Osteopathic Association data, and (3) Bureau of the Census population estimates.





## **APPENDIX**

## SHEA TECHNICAL NOTES

**The state health expenditure accounts (SHEA) present information based on the health care expenditures of Maryland residents and not on expenditures associated with Maryland providers.** This is in keeping with the 1993 health care reform legislation enacted by the Maryland General Assembly that focuses on the health care market faced by Maryland’s residents rather than a market defined by provider location. The Maryland Health Care Commission (MHCC) relies heavily on existing program and health care administration data to construct the accounts. This methodology enables MHCC to make use of the most consistent data available (generally audited) and minimizes redundant data collection and the associated expense. The information (as noted in explanations that follow) is derived principally from government sources. These consist of several state agencies, including the Maryland Insurance Administration (MIA), numerous administrations under the Department of Health and Mental Hygiene (DHMH), and the Department of Corrections (DOC). Federal agencies, which include the Health Care Financing Administration (HCFA), the Office of Personnel Management, and the Bureau of the Census, provide supporting information on Medicare health maintenance organization (HMO) enrollment and expenditures, data on health insurance coverage in the United States, and estimates of federal employee enrollment in health plans.

**Although the SHEA is modeled after the National Health Expenditure (NHE) accounts, the expenditures captured in the state accounts do not reflect the universe of expenditures included in the NHE.** Expenses for research, facility construction, government public health activities, and industry health services are not included in the state accounts. Also, the source of funds for state accounts differs from those used in the NHE. State accounts (1) separate NHE’s “private insurance” source into “health plans” and “other,” (2) omit from state and local government expenditures both hospital subsidies and workers compensation, and (3) exclude nonpatient revenues and philanthropy. The differences reflect the state’s primary focus on how *personal health care expenditures*—spending on health care services provided to patients—differ from year to year and by payer source and also reflect a reliance on existing data sources.

**The expenditure categories for resident-specific information on private sector expenditures are limited and based on estimates rather than actual expenditures.** Estimates for services to Maryland residents reimbursed by out-of-state payers are difficult to derive, because these data are not captured in state sources. Uninsured services (such as nursing home care) rendered to state residents by out-of-state providers are also difficult to estimate for the same reason. Such services occur most often for residents of counties surrounding the District of Columbia (DC), parts of northern Maryland adjacent to Delaware, and areas of Western Maryland bordering West Virginia. Out-of-state employment and the substantial use of out-of-state providers by residents in “border counties” likely result in some underestimates of spending in these areas. Out-of-pocket spending for uninsured services must also be viewed cautiously, because the Maryland-specific experience is not currently available. These estimates are derived from assumptions used to generate estimates of out-of-pocket spending for the NHE accounts. Monitoring the number of uninsured and the significant dollars spent by individuals on uncovered services is a priority of the Commission. The use of regional estimates from the Medical Expenditure Panel Survey conducted by the Agency for Health Care Policy and Research to refine the approximation of out-of-pocket spending by Maryland residents is being expanded for future reporting.

**Medicare and Medicaid HMO capitation payment allocations to specific provider/service categories were not possible due to the limitations of the information and financial systems supporting these government payers.** With capitated payments by these payers on the increase, especially within the Maryland Medicaid Program, extreme percentage changes in some service categories appear. Both Medicare and Medicaid are undergoing improvements to their data sources that will result in more reliable information for future reporting.

These caveats notwithstanding, the Commission believes that the methodology developed for the state health expenditure accounts is both sustainable at a manageable cost for the long term and accurate and comprehensive enough to provide answers to important questions on general health expenditure trends within the state.

## ***METHODS AND SOURCES FOR EACH PAYER CATEGORY***

The following section describes the data sources and methodologies used to develop Maryland's health expenditure accounts. Each data source is presented separately in the column order in which it appears on the health expenditure account tables.

### ***Original Medicare and Medicare+Choice***

HCFA provided Maryland-specific Medicare claims for calendar year 1999. Expenditures were summarized from aggregating payments from the following claim types: Inpatient, Outpatient, Physician Supplier, Durable Medical Equipment, Skilled Nursing Facilities, Home Health, and Hospice. These expenditures were distributed to Maryland regions by using the overall Medicare population's regional distribution and the cost differentials between regions as reflected in Medicare+Choice rates. Administration costs for Medicare indemnity were estimated by applying the Medicare program administration proportion from the NHE report for 1998 to all Medicare expenditures (indemnity and managed care) reported in the SHEA. Medicare enrollment figures were taken from data supplied to MHCC.

Medicare HMO expenditures were developed from a combination of HCFA sources, including HCFA's Managed Care Market Penetration Reports and Medicare Managed Care Contract Reports. A cost per enrollee was estimated by using reported national expenditures in the Contract Report. This per capita cost was applied to a count of Maryland Medicare managed care beneficiaries to estimate Medicare managed care expenditures in Maryland. The expenditure estimate was distributed to Maryland regions by using the overall Medicare managed care population's regional distribution and the cost differentials between regions as reflected in Medicare+Choice rates. Administration costs were estimated by averaging the administrative proportions from Maryland's private HMOs that received Medicare capitation payments from HCFA in 1999. Medicare managed care enrollment figures were taken from data supplied to MHCC.

Original Medicare categories of service comprising the SHEA row elements were defined directly from the claims: inpatient hospital (short- and long-stay), outpatient hospital (all outpatient hospital bills), physician (all medical specialties), other professional (nonphysician specialties), other (durable medical equipment [DME], ambulatory surgical centers [ASC], supplies), hospice (placed in Inpatient), home health, and skilled nursing facilities (SNF). No prescription drug data are reported here. Medicare+Choice categories of service were determined by statistics created for HCFA's 1996 NHE accounts.

### ***Traditional Medicaid and HealthChoice***

All data related to the Medicaid program were provided by Maryland's DHMH. Fiscal year Medicaid management information system (MMIS) (claims) data for 1999 and 2000 were averaged to develop estimates of Medicaid indemnity expenditures for calendar year 1999. MMIS data were reported by county, so regional Medicaid indemnity expenditures were calculated from county-level data. Administrative costs for the Medicaid indemnity program were also provided by DHMH.

Medicaid managed care payments were taken directly from DHMH data and reflect capitation payments made to all managed care organizations and HMOs in calendar year 1999. Medicaid managed care spending was allocated to regions based on the county distribution of these expenditures detailed in the MMIS reports. Administrative costs were estimated by averaging the administrative proportions from private HMOs

that received Medicaid managed care payments from HCFA in 1999. Medicaid enrollment figures, by eligibility category, were provided by MHCC.

Medicaid categories of service comprising the SHEA row elements were defined directly from data received by DHMH. Inpatient hospital services include acute care, rehabilitation, specific intermediate care, and residential treatment for addictions. Outpatient hospital services include acute care, rehabilitation, and psychiatric day care. Physician services include all medical specialty services, except dental. Other professional services include nonphysician specialties, dental, and ambulance services. Other services include DME and supplies. Home health care includes waivers, medical and personal day care, therapy, and private duty nursing care. Nursing home includes long-term care, nonaddiction-related intermediate care, and SNF. Capitation payments are rate determined for managed care organizations (MCOs) and HMO Medicaid enrollees. Prescription data were directly obtained from DHMH.

### ***Other Government***

Total expenditures represent seven distinct government categories: DOC, CHAMPUS, Veteran's Administration (VA), state hospitals, DHMH programs (including federal grants to DHMH programs), the AIDS Insurance Program, and the Maryland Pharmacy Assistance Program. The DOC provided overall payment amounts to be made in a specific fiscal year. Expenditures were allocated to SHEA rows based on the private indemnity distribution, with some proportional adjustments to reflect service restrictions in the DOC policy. Expenditures were distributed to three regions using the distribution of the state jail population as reported through the Department of Public Safety. CHAMPUS data on overall expenditures were distributed to service categories using proprietary indemnity claims data obtained for this project. CHAMPUS expenditures were distributed to regions using the distribution of the overall state population. The VA provided state-level expenditure data by service category. Expenditures were distributed to regions based on the distribution of the VA population in the state. Maryland state budget documents were used to develop expenditures for state hospitals (inpatient/outpatient psychiatric, chronic care, nursing home, and intermediate care facilities), DHMH programs (including local health department contributions to these programs), and federal grants supporting DHMH programs. These expenditures were distributed to regions using the distribution of the Maryland Medicaid population. Expenditures for two programs funded entirely with state funds—the Maryland Pharmacy Assistance Program and the AIDS Insurance Assistance Program—were developed from data obtained from DHMH. Administrative expenditures were calculated for the entire Other Government column using the administrative proportion for State and local funds from HCFA's 1998 NHE accounts.

### ***Private Sector: Insurers and Self-Insured***

Total private indemnity payments for 1999 incurred claims for Life and Health, Property and Casualty, and Non-profit companies were derived from annual filings submitted to the MIA. These expenditures formed the base against which additional adjustments were made for (1) expenditures by companies that are self-insured and (2) expenditures for Maryland residents employed in the District of Columbia and therefore not included in Maryland group contracts. Finally, estimated administrative costs were added based on information from the MIA. Once total expenditures were developed, the proprietary indemnity claims data obtained for this project were used to allocate total expenditures to service categories, and the distribution of the state's indemnity population was used to distribute expenditures to regions.

Enrollment in private indemnity plans was determined by subtracting the state's uninsured population, Medicaid enrollment (excluding dually enrolled and individuals in partial coverage programs), Medicare enrollment (as reported by HCFA), CHAMPUS enrollment, and private HMO enrollment.

***Private Sector: HMO***

Private-sector HMO expenditures were developed by aggregating data from all Maryland HMOs' 1999 financial submissions made to the MIA. Service category distributions were estimated for each HMO individually based on its reported information and then aggregated across all the HMOs. The estimate of total expenditures was then adjusted for (1) expenditures by companies that are self-insured and therefore not captured in the filings and (2) expenditures for Maryland residents employed in the District of Columbia and therefore not included in Maryland group contracts. Expenditures were distributed to regions based on the InterStudy data and enrollment information, which was also available in the annual financial submissions.

Each HMO that filed with the MIA provided service-level detail of expenditures. When possible, these services were mapped directly to standard SHEA row elements. Inpatient hospital services that were allocated directly include acute care, inpatient emergency care, and reinsurance recoveries. Outpatient hospital services that were directly allocated include ambulatory acute care, outpatient emergency care, and outpatient laboratory. Physician services that were directly allocated include all medical specialty services, outside referrals, professional emergency care, and mental health. Other professional services that were directly allocated include non-physician specialties, dental services, mental health services, and ambulance services. Other services include DME and supplies. Home health, nursing home, and prescription data were directly obtained from the filings. For each HMO, services that could not be collected directly were assigned to SHEA rows using a two-step process. If an HMO had no reported expenditures in specific SHEA categories, these categories were imputed using the distribution of all HMOs reporting in those categories. If an HMO had additional funds to be allocated after the first step, the remaining funds were distributed to outpatient, other professional, nursing home, home health, and other services using the specific HMOs distribution for those categories, after the first allocation process.

***Out-of-Pocket***

Out-of-pocket expenditures for Maryland were assumed to be the same proportions as those reported in the NHE accounts for personal health expenditures. Proportions were calculated by service category. These proportions were applied to total regional expenditures (calculated as the sum of the first seven columns of the SHEA, by region) to develop estimates of total out-of-pocket costs.

## **APPENDIX TABLES**

**Appendix Table 1A**  
**Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures (\$000s), 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$3,315,380</b>	<b>\$482,068</b>	<b>\$1,858,011</b>	<b>\$1,004,440</b>	<b>\$860,577</b>	<b>\$5,565,254</b>	<b>\$2,687,619</b>	<b>\$3,320,379</b>	<b>\$19,093,727</b>
Hospital Services									
Inpatient	1,667,792	160,993	422,404	227,999	181,947	1,250,251	611,997	106,526	4,629,910
Outpatient	405,352	33,443	72,170	110,098	47,262	534,756	295,525	132,644	1,631,249
Physician Services	685,597	178,617	41,145	378,506	118,851	1,745,241	1,015,990	810,299	4,974,247
Other Professional Services	95,362	3,737	201,392	42,035	348,807	255,999	112,830	919,311	1,979,473
Prescription Drugs	-----	20,477	178,067	95,741	82,471	963,713	274,159	586,559	2,201,187
Nursing Home Care	153,097	11,694	627,463	1,488	21,793	15,184	3,993	396,076	1,230,788
Home Health Care	115,823	7,248	256,705	12,425	3,052	63,647	33,350	168,690	660,940
Other Services	96,162	10,339	15,129	6,103	23,723	33,015	16,382	200,275	401,129
Admin. & Net Cost of Insurance	96,194	55,519	43,536	130,045	32,672	703,448	323,391	-----	1,384,805

**Appendix Table 1B**  
**Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures (\$000s), 1998 (revised)**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$3,264,524</b>	<b>\$479,773</b>	<b>\$1,885,926</b>	<b>\$903,652</b>	<b>\$834,019</b>	<b>\$4,955,830</b>	<b>\$2,731,987</b>	<b>\$3,192,500</b>	<b>\$18,248,210</b>
Hospital Services									
Inpatient	1,676,029	162,010	494,885	207,096	177,195	1,071,429	627,041	103,639	4,519,325
Outpatient	387,865	33,654	54,707	108,424	52,383	512,083	328,284	129,049	1,606,450
Physician Services	636,750	179,745	41,328	348,279	98,995	1,596,290	1,054,510	775,137	4,731,034
Other Professional Services	94,898	3,760	223,928	38,963	369,166	224,376	117,971	921,653	1,994,714
Prescription Drugs	-----	16,209	159,791	79,158	68,552	738,560	240,676	498,827	1,801,773
Nursing Home Care	164,670	11,768	603,488	1,154	16,826	11,666	3,534	373,717	1,186,824
Home Health Care	124,579	7,293	251,125	14,279	3,265	65,505	43,233	175,127	684,405
Other Services	90,388	10,405	15,781	7,001	21,995	40,618	21,198	215,351	422,737
Admin. & Net Cost of Insurance	89,345	54,928	40,893	99,297	25,642	695,303	295,540	-----	1,300,948

Appendix Table 1C

## Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures as a Percent of Total Expenditures by Payer, 1999

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	50.3	33.4	22.7	22.7	21.1	22.5	22.8	3.2	24.2
Outpatient	12.2	6.9	3.9	11.0	5.5	9.6	11.0	4.0	8.5
Physician Services	20.7	37.1	2.2	37.7	13.8	31.4	37.8	24.4	26.1
Other Professional Services	2.9	0.8	10.8	4.2	40.5	4.6	4.2	27.7	10.4
Prescription Drugs	-----	4.2	9.6	9.5	9.6	17.3	10.2	17.7	11.5
Nursing Home Care	4.6	2.4	33.8	0.1	2.5	0.3	0.1	11.9	6.4
Home Health Care	3.5	1.5	13.8	1.2	0.4	1.1	1.2	5.1	3.5
Other Services	2.9	2.1	0.8	0.6	2.8	0.6	0.6	6.0	2.1
Admin. & Net Cost of Insurance	2.9	11.5	2.3	12.9	3.8	12.6	12.0	-----	7.3

Appendix Table 1D

## Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures as a Percent of Total Expenditures by Payer, 1998

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.3	33.8	26.2	22.9	21.2	21.6	23.0	3.2	24.8
Outpatient	11.9	7.0	2.9	12.0	6.3	10.3	12.0	4.0	8.8
Physician Services	19.5	37.5	2.2	38.5	11.9	32.2	38.6	24.3	25.9
Other Professional Services	2.9	0.8	11.9	4.3	44.3	4.5	4.3	28.9	10.9
Prescription Drugs	-----	3.4	8.5	8.8	8.2	14.9	8.8	15.6	9.9
Nursing Home Care	5.0	2.5	32.0	0.1	2.0	0.2	0.1	11.7	6.5
Home Health Care	3.8	1.5	13.3	1.6	0.4	1.3	1.6	5.5	3.8
Other Services	2.8	2.2	0.8	0.8	2.6	0.8	0.8	6.7	2.3
Admin. & Net Cost of Insurance	2.7	11.4	2.2	11.0	3.1	14.0	10.8	-----	7.1



Appendix Table 1E

Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures as a Percent of Total Expenditures by Type of Service, 1999

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>17.4%</b>	<b>2.5%</b>	<b>9.7%</b>	<b>5.3%</b>	<b>4.5%</b>	<b>29.1%</b>	<b>14.1%</b>	<b>17.4%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	36.0	3.5	9.1	4.9	3.9	27.0	13.2	2.3	100.0
Outpatient	24.8	2.1	4.4	6.7	2.9	32.8	18.1	8.1	100.0
Physician Services	13.8	3.6	0.8	7.6	2.4	35.1	20.4	16.3	100.0
Other Professional Services	4.8	0.2	10.2	2.1	17.6	12.9	5.7	46.4	100.0
Prescription Drugs	-----	0.9	8.1	4.3	3.7	43.8	12.5	26.6	100.0
Nursing Home Care	12.4	1.0	51.0	0.1	1.8	1.2	0.3	32.2	100.0
Home Health Care	17.5	1.1	38.8	1.9	0.5	9.6	5.0	25.5	100.0
Other Services	24.0	2.6	3.8	1.5	5.9	8.2	4.1	49.9	100.0
Admin. & Net Cost of Insurance	6.9	4.0	3.1	9.4	2.4	50.8	23.4	-----	100.0

Appendix Table 1F

Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures as a Percent of Total Expenditures by Type of Service, 1998

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>17.9%</b>	<b>2.6%</b>	<b>10.3%</b>	<b>5.0%</b>	<b>4.6%</b>	<b>27.2%</b>	<b>15.0%</b>	<b>17.5%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	37.1	3.6	11.0	4.6	3.9	23.7	13.9	2.3	100.0
Outpatient	24.1	2.1	3.4	6.7	3.3	31.9	20.4	8.0	100.0
Physician Services	13.5	3.8	0.9	7.4	2.1	33.7	22.3	16.4	100.0
Other Professional Services	4.8	0.2	11.2	2.0	18.5	11.2	5.9	46.2	100.0
Prescription Drugs	-----	0.9	8.9	4.4	3.8	41.0	13.4	27.7	100.0
Nursing Home Care	13.9	1.0	50.8	0.1	1.4	1.0	0.3	31.5	100.0
Home Health Care	18.2	1.1	36.7	2.1	0.5	9.6	6.3	25.6	100.0
Other Services	21.4	2.5	3.7	1.7	5.2	9.6	5.0	50.9	100.0
Admin. & Net Cost of Insurance	6.9	4.2	3.1	7.6	2.0	53.4	22.7	-----	100.0

Appendix Table 1G

## Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures 1998/1999 Percent Change (Expenditure-Based Payer)

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	1.6%	0.5%	-1.5%	11.2%	3.2%	12.3%	-1.6%	4.0%	4.6%
Hospital Services									
Inpatient	-0.5	-0.6	-14.6	10.1	2.7	16.7	-2.4	2.8	2.4
Outpatient	4.5	-0.6	31.9	1.5	-9.8	4.4	-10.0	2.8	1.5
Physician Services	7.7	-0.6	-0.4	8.7	20.1	9.3	-3.7	4.5	5.1
Other Professional Services	0.5	-0.6	-10.1	7.9	-5.5	14.1	-4.4	-0.3	-0.8
Prescription Drugs	-----	26.3	11.4	20.9	20.3	30.5	13.9	17.6	22.2
Nursing Home Care	-7.0	-0.6	4.0	28.9	29.5	30.2	13.0	6.0	3.7
Home Health Care	-7.0	-0.6	2.2	-13.0	-6.5	-2.8	-22.9	-3.7	-3.4
Other Services	6.4	-0.6	-4.1	-12.8	7.9	-18.7	-22.7	-7.0	-5.1
Admin. & Net Cost of Insurance	7.7	1.1	6.5	31.0	27.4	1.2	9.4	-----	6.4

Appendix Table 1H

## Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures, 1998/1999 Percent Change (Row Shares)

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	1.6%	0.5%	-1.5%	11.2%	3.2%	12.3%	-1.6%	4.0%	4.6%
Hospital Services									
Inpatient	-2.0	-1.1	-13.4	-1.0	-0.5	3.9	-0.8	-1.2	-2.1
Outpatient	2.9	-1.1	33.9	-8.6	-12.6	-7.0	-8.5	-1.2	-3.0
Physician Services	6.0	-1.1	1.1	-2.2	16.4	-2.6	-2.1	0.5	0.5
Other Professional Services	-1.1	-1.1	-8.7	-2.9	-8.4	1.6	-2.8	-4.1	-5.2
Prescription Drugs	-----	25.7	13.1	8.8	16.6	16.2	15.8	13.1	22.2
Nursing Home Care	-8.5	-1.1	5.5	16.0	25.5	15.9	14.9	1.9	3.7
Home Health Care	-8.5	-1.1	3.8	-21.7	-9.4	-13.5	-21.6	-7.4	-3.4
Other Services	4.8	-1.1	-2.7	-21.6	4.5	-27.6	-21.4	-10.6	-5.1
Admin. & Net Cost of Insurance	6.0	0.6	8.1	17.8	23.5	-9.9	11.2	-----	6.4

**Appendix Table 1**  
**Maryland State Health Care Expenditures Account (SHEA): Total Maryland Expenditures, 1998/1999 Percent Change (Row Shares)**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>-2.9%</b>	<b>-4.0%</b>	<b>-5.8%</b>	<b>6.2%</b>	<b>-1.4%</b>	<b>7.3%</b>	<b>-6.0%</b>	<b>-0.6%</b>	<b>4.6%</b>
Hospital Services									
Inpatient	-2.9	-3.0	-16.7	7.5	0.2	13.9	-4.7	0.3	2.4
Outpatient	2.9	-2.1	29.9	-----	-11.1	2.8	-11.3	1.2	1.5
Physician Services	2.4	-5.5	-5.3	3.4	14.2	4.0	-8.4	-0.6	5.1
Other Professional Services	1.3	0.1	-9.4	8.7	-4.8	15.0	-3.6	0.5	-0.8
Prescription Drugs	-----	3.4	-8.8	-1.0	-1.5	6.8	-6.8	-3.7	22.2
Nursing Home Care	-10.3	-4.2	0.3	24.3	24.9	25.5	9.0	2.2	3.7
Home Health Care	-3.7	2.9	5.9	-9.9	-3.2	0.6	-20.1	-0.3	-3.4
Other Services	12.1	4.7	1.0	-8.1	13.7	-14.3	-18.6	-2.0	-5.1
Admin. & Net Cost of Insurance	1.1	-5.0	-----	23.0	19.7	-5.0	2.8	-----	6.4

**Appendix Table 2**  
**Maryland Per Capita Direct Health Care Spending on Covered Services**

	1998	1999	PERCENT CHANGE
Total Per Capita Expenditures (including out-of-pocket costs)	\$3,300	\$3,424	3.8%
Total Per Capita Expenditures (excluding out-of-pocket costs)	2,982	3,070	3.0%

Excludes Administration and Net Cost of Insurance

**Appendix Table 3**  
**Maryland Per Capita Total Health Care Expenditures by Type of Service, 1998 and 1999**

EXPENDITURE COMPONENTS	1998		1999	
	Percent Share	Expenditure	Percent Share	Expenditure
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>\$3,300</b>	<b>100.0%</b>	<b>\$3,424</b>
Hospital Services				
Inpatient	26.7	880	26.1	895
Outpatient	9.5	313	9.2	315
Physician Services	27.9	921	28.1	962
Other Professional Services	11.8	388	11.2	383
Prescription Drugs	10.6	351	12.4	426
Nursing Home Care	7.0	231	7.0	238
Home Health Care	4.0	133	3.7	128
Other Services	2.5	82	2.3	78

**Appendix Table 4**  
**Government and Private Expenditures (\$000s) by Type of Service, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR				PRIVATE SECTOR			TOTAL
	Medicare	Medicaid	Other Gov't	Total Gov't	Private Coverage	Out-of-Pocket	Total Private	
<b>Total Health Expenditures</b>	<b>\$3,797,447</b>	<b>\$2,862,451</b>	<b>\$860,577</b>	<b>\$7,520,476</b>	<b>\$8,252,873</b>	<b>\$3,320,379</b>	<b>\$11,573,252</b>	<b>\$19,093,727</b>
Hospital Services								
Inpatient	1,828,785	650,403	181,947	2,661,135	1,862,248	106,526	1,968,775	4,629,910
Outpatient	438,795	182,268	47,262	668,324	830,281	132,644	962,925	1,631,249
Physician Services	864,214	419,652	118,851	1,402,717	2,761,231	810,299	3,571,530	4,974,247
Other Professional Services	99,099	243,427	348,807	691,333	368,829	919,311	1,288,140	1,979,473
Prescription Drugs	20,477	273,808	82,471	376,756	1,237,871	586,559	1,824,430	2,201,187
Nursing Home Care	164,791	628,951	21,793	815,535	19,178	396,076	415,253	1,230,788
Home Health Care	123,071	269,130	3,052	395,253	96,997	168,690	265,687	660,940
Other Services	106,501	21,233	23,723	151,457	49,398	200,275	249,673	401,129
Admin. & Net Cost of Insurance	151,713	173,580	32,672	357,965	1,026,839	-----	1,026,839	1,384,805

**Appendix Table 5**  
**Maryland Health Expenditures (\$000s) by Source of Coverage, 1999**

EXPENDITURE COMPONENTS	INSURERS AND OTHER PAYERS			HMO			OUT-OF-POCKET	TOTAL
	Government	Private	Total	Government	Private	Total		
<b>Total Health Expenditures</b>	<b>\$6,033,968</b>	<b>\$5,565,254</b>	<b>\$11,599,222</b>	<b>\$1,486,508</b>	<b>\$2,687,619</b>	<b>\$4,174,126</b>	<b>\$3,320,379</b>	<b>\$19,093,727</b>
Hospital Services								
Inpatient	2,272,142	1,250,251	3,522,394	388,993	611,997	1,000,990	106,526	4,629,910
Outpatient	524,784	534,756	1,059,540	143,541	295,525	439,066	132,644	1,631,249
Physician Services	845,593	1,745,241	2,590,834	557,123	1,015,990	1,573,114	810,299	4,974,247
Other Professional Services	645,562	255,999	901,561	45,772	112,830	158,602	919,311	1,979,473
Prescription Drugs	260,538	963,713	1,224,251	116,218	274,159	390,377	586,559	2,201,187
Nursing Home Care	802,353	15,184	817,537	13,182	3,993	17,175	396,076	1,230,788
Home Health Care	375,581	63,647	439,227	19,672	33,350	53,023	168,690	660,940
Other Services	135,014	33,015	168,029	16,443	16,382	32,825	200,275	401,129
Admin. & Net Cost of Insurance	172,401	703,448	875,849	185,564	323,391	508,955	-----	1,384,805

**Appendix Table 6A**  
**Regional Health Care Expenditures (\$000s), National Capital Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$855,447</b>	<b>\$93,898</b>	<b>\$372,265</b>	<b>\$179,403</b>	<b>\$197,576</b>	<b>\$1,678,829</b>	<b>\$813,876</b>	<b>\$951,818</b>	<b>\$5,143,113</b>
Hospital Services									
Inpatient	443,189	35,440	92,514	46,780	45,656	401,943	210,678	30,371	1,306,570
Outpatient	107,716	7,362	6,427	22,589	13,612	181,237	101,733	37,817	478,494
Physician Services	182,186	39,320	9,582	77,660	25,585	611,306	349,751	252,081	1,547,471
Other Professional Services	25,341	823	31,047	8,624	84,924	112,231	38,841	261,731	563,562
Prescription Drugs	-----	4,508	35,953	19,644	15,886	332,393	94,378	182,642	685,403
Nursing Home Care	40,683	2,574	135,605	305	6,158	5,243	1,375	91,079	283,023
Home Health Care	30,778	1,595	57,733	2,549	963	26,111	11,481	44,965	176,175
Other Services	25,553	2,276	3,403	1,252	4,791	8,366	5,640	51,133	102,414

**Appendix Table 6B**  
**Regional Health Care Expenditures Proportioned by Service Categories, National Capital Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.8	37.7	24.9	26.1	23.1	23.9	25.9	3.2	25.4
Outpatient	12.6	7.8	1.7	12.6	6.9	10.8	12.5	4.0	9.3
Physician Services	21.3	41.9	2.6	43.3	12.9	36.4	43.0	26.5	30.1
Other Professional Services	3.0	0.9	8.3	4.8	43.0	6.7	4.8	27.5	11.0
Prescription Drugs	-----	4.8	9.7	10.9	8.0	19.8	11.6	19.2	13.3
Nursing Home Care	4.8	2.7	36.4	0.2	3.1	0.3	0.2	9.6	5.5
Home Health Care	3.6	1.7	15.5	1.4	0.5	1.6	1.4	4.7	3.4
Other Services	3.0	2.4	0.9	0.7	2.4	0.5	0.7	5.4	2.0

**Appendix Table 6C**  
**Regional Health Care Expenditures Proportioned by Payers, National Capital Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>16.0%</b>	<b>1.8%</b>	<b>7.0%</b>	<b>3.4%</b>	<b>3.7%</b>	<b>31.4%</b>	<b>15.2%</b>	<b>18.5%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	33.8	2.7	7.0	3.6	3.5	30.6	16.1	2.3	100.0
Outpatient	22.2	1.5	1.3	4.7	2.8	37.4	21.0	7.9	100.0
Physician Services	11.4	2.5	0.6	4.9	1.6	38.3	21.9	16.3	100.0
Other Professional Services	4.1	0.1	5.0	1.4	13.8	18.2	6.3	46.4	100.0
Prescription Drugs	-----	0.6	5.0	2.8	2.2	46.6	13.2	26.6	100.0
Nursing Home Care	12.8	0.8	42.8	0.1	1.9	1.7	0.4	32.2	100.0
Home Health Care	16.6	0.9	31.1	1.4	0.5	14.1	6.2	25.5	100.0
Other Services	22.3	2.0	3.0	1.1	4.2	7.3	4.9	49.9	100.0

**Appendix Table7A**  
**Regional Health Care Expenditures (\$000s), Baltimore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$1,708,730</b>	<b>\$285,719</b>	<b>\$1,052,555</b>	<b>\$507,242</b>	<b>\$453,639</b>	<b>\$2,252,508</b>	<b>\$1,111,203</b>	<b>\$1,703,542</b>	<b>\$9,075,137</b>
Hospital Services									
Inpatient	885,257	107,840	272,192	132,264	98,244	588,166	287,643	55,458	2,427,063
Outpatient	215,159	22,402	56,612	63,868	22,733	243,787	138,899	69,055	832,515
Physician Services	363,912	119,645	23,110	219,574	65,000	814,745	477,522	405,448	2,488,956
Other Professional Services	50,618	2,503	126,077	24,385	196,630	102,803	53,031	482,171	1,038,217
Prescription Drugs	-----	13,716	102,247	55,540	46,410	447,197	128,856	288,431	1,082,398
Nursing Home Care	81,263	7,833	323,143	863	11,255	7,035	1,877	205,588	638,856
Home Health Care	61,479	4,855	140,669	7,208	1,447	30,398	15,675	89,693	351,424
Other Services	51,042	6,926	8,506	3,541	11,919	18,377	7,700	107,699	215,708

**Appendix Table7B**  
**Regional Health Care Expenditures Proportioned by Service Categories, Baltimore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.8	37.7	25.9	26.1	21.7	26.1	25.9	3.3	26.7
Outpatient	12.6	7.8	5.4	12.6	5.0	10.8	12.5	4.1	9.2
Physician Services	21.3	41.9	2.2	43.3	14.3	36.2	43.0	23.8	27.4
Other Professional Services	3.0	0.9	12.0	4.8	43.3	4.6	4.8	28.3	11.4
Prescription Drugs	-----	4.8	9.7	10.9	10.2	19.9	11.6	16.9	11.9
Nursing Home Care	4.8	2.7	30.7	0.2	2.5	0.3	0.2	12.1	7.0
Home Health Care	3.6	1.7	13.4	1.4	0.3	1.3	1.4	5.3	3.9
Other Services	3.0	2.4	0.8	0.7	2.6	0.8	0.7	6.3	2.4

**Appendix Table 7C**  
**Regional Health Care Expenditures Proportioned by Service Categories, Baltimore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>19.0%</b>	<b>3.2%</b>	<b>11.7%</b>	<b>5.6%</b>	<b>5.0%</b>	<b>25.1%</b>	<b>12.4%</b>	<b>18.8%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	36.5	4.5	11.2	5.5	4.1	24.3	11.9	2.3	100.0
Outpatient	26.1	2.7	6.9	7.7	2.8	29.5	16.8	8.3	100.0
Physician Services	14.7	4.8	0.9	8.9	2.6	33.0	19.3	16.3	100.0
Other Professional Services	5.1	0.3	12.7	2.5	19.8	10.3	5.3	46.4	100.0
Prescription Drugs	-----	1.2	9.3	5.0	4.2	40.6	11.7	26.6	100.0
Nursing Home Care	13.1	1.3	52.0	0.1	1.8	1.1	0.3	32.2	100.0
Home Health Care	17.9	1.4	41.0	2.1	0.4	8.9	4.6	25.5	100.0
Other Services	24.8	3.4	4.1	1.7	5.8	8.9	3.7	49.9	100.0

**Appendix Table 8A**  
**Regional Health Care Expenditures (\$000s), Eastern Shore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$254,170</b>	<b>\$26,807</b>	<b>\$154,902</b>	<b>\$74,647</b>	<b>\$66,404</b>	<b>\$227,742</b>	<b>\$166,623</b>	<b>\$235,434</b>	<b>\$1,206,728</b>
Hospital Services									
Inpatient	131,680	10,118	22,597	19,464	14,205	53,672	43,132	7,132	302,000
Outpatient	32,005	2,102	3,360	9,399	3,748	36,893	20,828	8,881	117,215
Physician Services	54,131	11,225	3,405	32,313	10,075	77,166	71,604	50,580	310,499
Other Professional Services	7,529	235	19,331	3,588	26,487	8,599	7,952	63,927	137,648
Prescription Drugs	-----	1,287	15,234	8,173	7,783	44,906	19,322	35,131	131,836
Nursing Home Care	12,088	735	70,340	127	1,632	711	281	40,767	126,682
Home Health Care	9,145	455	19,240	1,061	227	2,159	2,350	11,870	46,508
Other Services	7,592	650	1,395	521	2,247	3,636	1,155	17,146	34,342



**Appendix Table 8B**  
**Regional Health Care Expenditures Proportioned by Service Categories, Eastern Shore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.8	37.7	14.6	26.1	21.4	23.6	25.9	3.0	25.0
Outpatient	12.6	7.8	2.2	12.6	5.6	16.2	12.5	3.8	9.7
Physician Services	21.3	41.9	2.2	43.3	15.2	33.9	43.0	21.5	25.7
Other Professional Services	3.0	0.9	12.5	4.8	39.9	3.8	4.8	27.2	11.4
Prescription Drugs	-----	4.8	9.8	10.9	11.7	19.7	11.6	14.9	10.9
Nursing Home Care	4.8	2.7	45.4	0.2	2.5	0.3	0.2	17.3	10.5
Home Health Care	3.6	1.7	12.4	1.4	0.3	0.9	1.4	5.0	3.9
Other Services	3.0	2.4	0.9	0.7	3.4	1.6	0.7	7.3	2.8

**Appendix Table 8C**  
**Regional Health Care Expenditures Proportioned by Payers, Eastern Shore Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>21.1%</b>	<b>2.2%</b>	<b>12.8%</b>	<b>6.2%</b>	<b>5.5%</b>	<b>18.9%</b>	<b>13.8%</b>	<b>19.5%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	43.7	3.4	7.5	6.5	4.7	17.8	14.3	2.4	100.0
Outpatient	26.6	1.7	2.8	7.8	3.1	30.7	17.3	7.6	100.0
Physician Services	17.4	3.6	1.1	10.4	3.2	24.8	23.0	16.3	100.0
Other Professional Services	5.4	0.2	13.8	2.6	19.0	6.2	5.7	46.4	100.0
Prescription Drugs	-----	0.9	10.9	5.8	5.6	32.0	13.8	26.6	100.0
Nursing Home Care	10.5	0.6	60.9	0.1	1.4	0.6	0.2	32.2	100.0
Home Health Care	19.4	1.0	40.9	2.3	0.5	4.6	5.0	25.5	100.0
Other Services	23.4	2.0	4.3	1.6	6.9	11.2	3.6	49.9	100.0

**Appendix Table 9A**  
**Regional Health Care Expenditures (\$000s), Southern Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$131,749</b>	<b>\$9,540</b>	<b>\$73,160</b>	<b>\$35,256</b>	<b>\$36,031</b>	<b>\$382,292</b>	<b>\$102,110</b>	<b>\$171,487</b>	<b>\$941,624</b>
Hospital Services									
Inpatient	68,257	3,601	13,915	9,193	8,216	118,596	26,432	5,626	253,835
Outpatient	16,590	748	1,388	4,439	2,362	31,569	12,764	7,006	76,865
Physician Services	28,059	3,995	1,910	15,261	4,624	136,359	43,880	45,553	279,641
Other Professional Services	3,903	84	10,224	1,695	15,548	14,259	4,873	43,864	94,448
Prescription Drugs	-----	458	7,177	3,860	3,191	76,208	11,841	37,321	140,057
Nursing Home Care	6,266	262	25,346	60	1,093	1,194	172	16,319	50,711
Home Health Care	4,740	162	12,367	501	167	2,604	1,440	7,533	29,515
Other Services	3,936	231	833	246	831	1,503	708	8,263	16,550

**Appendix Table 9B**  
**Regional Health Care Expenditures Proportioned by Service Categories, Southern Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.8	37.7	19.0	26.1	22.8	31.0	25.9	3.3	27.0
Outpatient	12.6	7.8	1.9	12.6	6.6	8.3	12.5	4.1	8.2
Physician Services	21.3	41.9	2.6	43.3	12.8	35.7	43.0	26.6	29.7
Other Professional Services	3.0	0.9	14.0	4.8	43.2	3.7	4.8	25.6	10.0
Prescription Drugs	-----	4.8	9.8	10.9	8.9	19.9	11.6	21.8	14.9
Nursing Home Care	4.8	2.7	34.6	0.2	3.0	0.3	0.2	9.5	5.4
Home Health Care	3.6	1.7	16.9	1.4	0.5	0.7	1.4	4.4	3.1
Other Services	3.0	2.4	1.1	0.7	2.3	0.4	0.7	4.8	1.8

**Appendix Table 9C**  
**Regional Health Care Expenditures Proportioned by Payers, Southern Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>13.6%</b>	<b>1.0%</b>	<b>7.5%</b>	<b>3.6%</b>	<b>3.7%</b>	<b>39.4%</b>	<b>10.5%</b>	<b>18.2%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	26.9	1.4	5.5	3.6	3.2	46.8	10.4	2.2	100.0
Outpatient	21.2	1.0	1.8	5.7	3.0	40.4	16.3	9.1	100.0
Physician Services	9.7	1.4	0.7	5.3	1.6	47.3	15.2	16.3	100.0
Other Professional Services	3.8	0.1	10.0	1.7	15.2	13.9	4.8	46.4	100.0
Prescription Drugs	-----	0.3	5.0	2.7	2.2	53.5	8.3	26.6	100.0
Nursing Home Care	11.2	0.5	45.2	0.1	1.9	2.1	0.3	32.2	100.0
Home Health Care	15.3	0.5	39.8	1.6	0.5	8.4	4.6	25.5	100.0
Other Services	20.3	1.2	4.3	1.3	4.3	7.8	3.6	49.9	100.0

**Appendix Table 10A**  
**Regional Health Care Expenditures (\$000s), Western Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>\$269,089</b>	<b>\$10,585</b>	<b>\$161,594</b>	<b>\$77,848</b>	<b>\$74,256</b>	<b>\$320,436</b>	<b>\$170,415</b>	<b>\$258,099</b>	<b>\$1,342,321</b>
Hospital Services									
Inpatient	139,409	3,995	21,187	20,299	15,626	87,874	44,113	7,939	340,442
Outpatient	33,883	830	4,383	9,802	4,806	41,270	21,302	9,885	126,161
Physician Services	57,308	4,432	3,138	33,698	13,567	105,665	73,233	56,636	347,679
Other Professional Services	7,971	93	14,714	3,742	25,219	18,108	8,133	67,619	145,598
Prescription Drugs	-----	508	17,456	8,524	9,201	63,009	19,761	43,034	161,493
Nursing Home Care	12,797	290	73,029	132	1,655	1,001	288	42,323	131,515
Home Health Care	9,682	180	26,696	1,106	247	2,374	2,404	14,629	57,318
Other Services	8,038	257	993	543	3,935	1,134	1,181	16,034	32,114

**Appendix Table 10B**  
**Regional Health Care Expenditures Proportioned by Service Categories, Western Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	51.8	37.7	13.1	26.1	21.0	27.4	25.9	3.1	25.4
Outpatient	12.6	7.8	2.7	12.6	6.5	12.9	12.5	3.8	9.4
Physician Services	21.3	41.9	1.9	43.3	18.3	33.0	43.0	21.9	25.9
Other Professional Services	3.0	0.9	9.1	4.8	34.0	5.7	4.8	26.2	10.8
Prescription Drugs	-----	4.8	10.8	10.9	12.4	19.7	11.6	16.7	12.0
Nursing Home Care	4.8	2.7	45.2	0.2	2.2	0.3	0.2	16.4	9.8
Home Health Care	3.6	1.7	16.5	1.4	0.3	0.7	1.4	5.7	4.3
Other Services	3.0	2.4	0.6	0.7	5.3	0.4	0.7	6.2	2.4

**Appendix Table 10C**  
**Regional Health Care Expenditures Proportioned by Payers, Western Maryland Area, 1999**

EXPENDITURE COMPONENTS	GOVERNMENT SECTOR					PRIVATE SECTOR			TOTAL EXPENDITURES
	Medicare		Medicaid		Other Government	Insurers & Self-Funded	HMO	Out-of-Pocket	
	Original	+Choice	Traditional	HealthChoice					
<b>Total Health Expenditures</b>	<b>19.9%</b>	<b>0.8%</b>	<b>11.9%</b>	<b>5.8%</b>	<b>5.5%</b>	<b>23.7%</b>	<b>12.6%</b>	<b>19.2%</b>	<b>100.0%</b>
Hospital Services									
Inpatient	40.7	1.2	6.2	5.9	4.6	25.6	12.9	2.3	100.0
Outpatient	26.5	0.6	3.4	7.7	3.8	32.3	16.7	7.8	100.0
Physician Services	16.3	1.3	0.9	9.6	3.9	30.0	20.8	16.3	100.0
Other Professional Services	5.3	0.1	9.7	2.5	16.6	11.9	5.4	46.4	100.0
Prescription Drugs	-----	0.3	10.4	5.1	5.5	37.5	11.7	26.6	100.0
Nursing Home Care	10.5	0.2	60.2	0.1	1.4	0.8	0.2	32.2	100.0
Home Health Care	17.2	0.3	47.4	2.0	0.4	4.2	4.3	25.5	100.0
Other Services	24.7	0.8	3.1	1.7	12.1	3.5	3.6	49.9	100.0